



# How to be a good rural extensionist. Reflections and contributions of Argentine practitioners



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## ABSTRACT

Quality rural extension is of utmost importance for generating food security and sustainable rural development. In this paper, Argentine rural extensionists' point of view on how to be a good practitioner is described, as well as compared to good practices proposed by scholars and international development organizations. Forty rural extensionists from the Northeastern Argentine provinces were interviewed (29 men, 11 women). Interviews were recorded and transcribed, texts were categorized and contents analyzed. Scholars and extensionists, despite agreeing to most of the same principles, frame their recommendations for good extension practices in different ways. The former's recommendations tend to be supported by multiple case studies and focused on best practices on the level of extension projects or policies, while the latter's tend to draw upon their own experience and develop proposals more concerned with interpersonal interactions and with overcoming practical problems in real (and not ideal) settings.

Best extension practices depend on environmental, institutional, political and cultural contexts, this implying there is no best extension practice in general. Training extensionists in interpersonal skills and in social sciences is key for reaching good extension results. Horizontal communication between farmers and extensionists, negotiation over best technologies, and helping farmers reflect on their productive practices are extension strategies with great potential.

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## 1. Introduction

Quality rural extension is of utmost importance for generating food security and sustainable rural development. During recent years, international institutions such as the Food and Agriculture Organization of the United Nations (FAO) and the Global Forum for Rural Advisory Services (GFRAS) have highlighted the importance of quality rural extension services (e.g. [Acunzo et al., 2014](#); [Ortiz et al., 2011a](#); [Qamar, 2011](#); [Sulaiman and Davis, 2012](#)). Nonetheless, the contents of quality rural extension work are not commonly addressed in academic literature. With regards to the topic, [Nederlof et al. \(2008\)](#) argue that quality is a subjective perception, thus implying that its evaluation depends on the subjects' point of view. In an analysis of factors that express quality, [Birner et al.](#)

(2006) describe the quality of rural extension as:

- (1) The accuracy and relevance of the contents of the advice, (2) the timeliness and reach of the advice [...], (3) the quality of the partnerships established and the feedback effects created, (4) the efficiency of service delivery, and other economic performance indicators (p. 30)

Indirectly, different authors and international development organizations have also presented general guidelines and critical factors for reaching desirable extension results. In this context, the concept of 'best practice' has been widely used in the literature in English dedicated to studying the subject. However, this notion seems highly problematic, given it assumes there is a specific practice that is the best, without considering the context wherein it has to be applied ([Aguirre, 2012](#); [Ortiz et al., 2011a](#)). 'Methodologies are appropriate for certain purposes, but less so for others. There is [...] no one method that works as a "magic bullet" for all farmers in all contexts' ([Christoplos et al., 2012](#),

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35). Instead, the idea of ‘good practices’ seems preferable, given it assumes there is no one best practice, but a pool of potentially useful alternatives that are specific to a particular situation and context.

Another argument that supports the idea of good practices against that of best practice does so by acknowledging the existence of different extension aims and models. Towards the middle of the 20th century, rural extension consolidated as a practice focused on the transfer of technology (Rogers, 1962). In this context, high rates of adoption of technologies could be considered as being an indicator of quality rural extension. However, over the years, many authors have criticized this approach. Placing particular focus on the interaction between advisors and farmers, Freire (1973) argued for the need to establish a horizontal, constructivist relationship between both, aiming to develop farmers’ critical thinking and capacity to integrate local and expert knowledge. In this context, the quality of rural extension cannot be tied to adoption rates or even to practices aimed at the transfer of technologies. Later, Chambers (1983) argued the need for ‘putting the last first’, that is, putting peasants and farmers (and not rural extensionists or agricultural technologies) first, thus paving the way for participatory approaches. In this vein, the degree to which farmers are taken into account when policy is developed and implemented could be considered a quality standard.

The same argument could be made when considering more recent extension approaches that broaden the scope of analysis and the actors involved. In this line, innovations systems approach analyzes innovation in terms of the interaction between a diversity of social players and institutions pertaining to different sub-systems, not only to rural areas (Klerkx et al., 2012a). Therefore, what is defined as quality rural extension will depend on the particular extension approach in question, and in this case would depend on the extensionist’s capacity for facilitating and brokering knowledge dynamics among these actors (Klerkx et al., 2012b). Thus, there could never be a best practice in general, because it will always depend on the contextual characteristics and specificities of the territory, as well as on the extension approach that is framing the interventions.

Having acknowledged the existence of a multiplicity of context-dependent, good extension practices, the most relevant guidelines and critical factors, proposed by academic and institutional literature, for increasing the quality and impact of rural extension will be briefly discussed.

### 1.1. Practitioners with high levels of education and knowledge

There is a growing agreement that quality rural extension requires practitioners with high levels of education and capacities in several relevant areas (Aguirre, 2012; Preissing et al., 2014; Sulaiman and Davis, 2012). It has been argued that human resources constitute a key bottleneck for an effective rural advisory service (GFRAS, 2010). Interestingly, authors highlight that a university based, technical education does not provide enough tools for extension practice, given it requires not only knowledge and/or capabilities in technical areas, but also in social processes such as empowering farmers to deal with uncertainties, critical thinking (GFRAS, 2010), participatory methodologies, planning and evaluation (Ortiz, 2009), leadership, and community development (Swanson, 2008), among others. In this context, continued education courses for graduates (Preissing et al., 2014) and in-service training (Swanson, 2008), as well as unconventional approaches to practical learning (Sulaiman and Davis, 2012; Landini et al., 2013) emerge as highly valuable strategies.

### 1.2. Interdisciplinary approach

During the last few decades, the complexity of rural extension has increased enormously, from simply transferring technologies to the facilitation of processes at interpersonal, group, institutional and territorial levels (Méndez, 2006). Thus, no individual practitioner is capable of mastering the long list of hard and soft capacities required by their position (Landini, 2013a; Sulaiman and Davis, 2012) as well as adopting a complex, holistic approach (Bifani, 2001). In any case, even though there is a solid agreement for the need for working in an interdisciplinary manner in extension teams and not as individual extensionists (Ortiz et al., 2011a), the great majority of extensionists are still technical practitioners and the framing of the problems tends to be productive (Landini and Bianqui, 2014).

### 1.3. To adopt a participatory and demand-driven approach

One of the most important transformations that have taken place in rural extension over the last decades is the adoption of a demand-driven, participatory approach (Trigo et al., 2013). Nowadays, we consider that rural extension has to be structured by demand and not by supply (GFRAS, 2010; Qamar, 2011). Interestingly, farmers’ participation in the identification of problems and in the design of projects increases the probability of reaching good extension results (Bifani, 2001; Ortiz et al., 2011b), given they are more likely to be framed in terms of their rationale (Landini et al., 2009). In this context, the strengthening of farmers’ organizations constitutes a pre-requisite for a demand-driven approach, so as they can act as extensionists’ counterparts (Aguirre, 2012). Nonetheless, when addressing these topics, academic literature seems to consider participatory and demand-driven approaches as being synonymous when they in fact are not. In a demand-driven approach, extension services work with what farmers require or ask for, or aim at addressing their most important perceived problems (Ortiz, 2009). However, real participation goes beyond letting farmers decide what problems are going to be addressed, and additionally entails influencing the framing of these problems, the project’s design and the evaluation of the results.

### 1.4. Addressing gender issues

Traditionally, rural extension has tended to address mainly male farmers. However, nowadays, it is clear that women play a key role in agri-food systems (GFRAS, 2010) and that extension services have to address gender equity in order to generate sustainable impacts (Ortiz, 2009; Ortiz et al., 2011b). Many extension institutions and NGOs have implemented initiatives directed only at female farmers (Qamar, 2011; Preissing et al., 2014) as a way of empowering them. Despite the fact that this is a valuable strategy, it has to be acknowledged that a gender-based approach is not only addressing women in agriculture, but also developing and implementing interventions that take into account how they are going to influence male and female farmers differently.

### 1.5. Articulating research and extension from an innovation systems approach

In the context of a diffusionist approach (Rogers, 1962) the relationship among researchers, extensionists and farmers was conceived as being top–down. Thus, researchers were expected to develop innovations, extensionists to transfer them and farmers to adopt them. However, nowadays, scholars acknowledge innovation processes must not follow a traditional, top–down approach, but instead a more horizontal and systemic one (Leeuwis, 2004),

wherein communication is bidirectional (Preissing et al., 2014) and innovations are co-designed (Aguirre, 2012). In this line, innovations are expected to emerge from 'innovation platforms' integrated by a wide range of actors with complementary knowledge and experiences (Nederlof et al., 2008; Sulaiman and Davis, 2012) and a common definition of objectives (Trigo et al., 2013).

#### 1.6. Promoting social capital and supporting farmer organizations

Many scholars have highlighted the importance of developing and strengthening farmer organizations (Dirven, 2003; Qamar, 2011). By forming organizations, farmers can increase the scale of their activities and thus their negotiation power with respects to input providers and produce buyers (Landini, 2007; Swanson, 2008), give voice to poor farmers' claims (Nederlof et al., 2008), work as counterparts in the context of demand-driven and participatory approaches (Aguirre, 2012) and, most importantly, help farmers become activists for their own wellbeing and development and not be passive recipients of assistance (Pérez and Clavijo, 2012). In this line, the development of administrative and management capabilities is crucial (Ortiz et al., 2011a) for achieving long-term sustainability (Swanson, 2008).

#### 1.7. Importance of monitoring and evaluation

Usually, in the context of extension projects, much more attention is given to the diagnosis and to the development of projects than to their monitoring and evaluation. Nonetheless, monitoring is crucial for correcting deviations, increasing achievements, and identifying short and long-term impacts (Preissing et al., 2014). Both have to be included in the design phase of the interventions and not simply implemented at the end. Additionally, quality monitoring and evaluation provide information useful for facilitating learning from experience (Christoplos et al., 2012; IFAD, 2009). Finally, evaluation of outcomes and impacts also plays a key role when designing evidence-based extension policies (Aguirre, 2012).

#### 1.8. Interinstitutional articulation and facilitation of arrangements among different institutions and social actors

In the rural extension context, two different, yet interrelated, approaches highlight the value of articulation among different institutional, social and economic actors. First of all, a territorial approach to rural development highlights that no one institution can generate significant impacts in terms of development by itself (Ortiz, 2009), this leading to the need for interinstitutional arrangements in order to coordinate interventions and resource allocation (Ortiz et al., 2011a; Ortiz et al., 2011b). Thus, new alliances with the public and the private sector are encouraged, as well as with farmers' and others' organizations (Aguirre, 2012). Secondly, an innovation systems approach also supports the articulation between different institutions and actors, but in this case not in terms of coordinating territorial interventions, but instead in the context of agricultural innovation systems (Leeuwis, 2004). Here, extensionists adopt the role of facilitators of the interactions between research institutions, market agents and public development agencies, among others, in order to generate social learning and innovation processes (Nederlof et al., 2008; Pérez and Clavijo, 2012; Sulaiman and Davis, 2012).

#### 1.9. Horizontal communication and relationship between extensionists and farmers

Traditionally rural extension adopted a top–down approach,

which implied a hierarchical relationship between extensionists and farmers. Several authors criticized this model based on ethical, but also practical, reasons (Landini et al., 2009). When interventions are only aimed at the transfer of technologies in highly structured contexts, this approach may be fruitful. However, a horizontal interaction is an indispensable pre-requisite if a participatory methodology is to be applied (Ortiz, 2009). Finally, in the context of an agricultural innovation system, the more horizontal and flexible the interaction is, the higher the possibilities for learning and innovation. As Freire (1973) states, the best alternatives are the result of a dialog between actors with different types of knowledge.

#### 1.10. Sustainable rural development projects and environmental sustainability

The sustainability of extension outcomes and impacts is crucial. However, extension interventions usually have low sustainability (Christoplos et al., 2012). The reasons for this are multiple, including the lack of real, contextually suitable and culturally appropriated participatory processes that ensure farmers' ownership (Ortiz et al., 2011a); insufficient organizational or institutional strengthening to support the continuity of the process; prioritization of visible, short-term results over long-term impacts (GFRAS, 2010); and focalized, technical recommendations that neglect to understand the complexity of material, commercial and social factors that make up farmers' environment. In this context, many practitioners tend to look for explanations for low project sustainability in farmers' lack of commitment, while disregarding their own and their institutions' role in this (Landini et al., 2013). Interestingly, environmental sustainability, an increasingly important extension priority (Friedrich, 2014; Ortiz, 2009; Swanson, 2008), also has to be considered as being a part of project sustainability (IFAD, 2009), given the fact that if productive practices are not sustainable, neither are projects as a whole. In this context, the role of public rural extension has to be highlighted, because sustainable natural resources management, as a public good, is not a priority for private extensionists (Swanson, 2008).

#### 1.11. Flexibility and acknowledgment of diversity

Both farmers and territories are highly heterogeneous in environmental, productive, commercial, cultural, gender and ethnical terms. Producers have different levels of availability of resources (capital, land) as well as different productive practices. This implies that rural extension programs designed at a central level have to explicitly consider this diversity and include specific instances to address it (Aguirre, 2012; Preissing et al., 2014), and even differentiate the services and the approach recommended depending on the territory and the beneficiaries' characteristics (Nederlof et al., 2008). What's more, extensionists also have to master different extension methodologies in order to implement the one that best fits the situation (Ortiz, 2009).

#### 1.12. Objective of the research

After this analysis, it is clear that scholarly literature has amply contributed to identifying many critical factors for improving extension quality. Nonetheless, a review of their methodological approaches shows the existence of general limitations. While most available publications are authored by researchers or extension experts and based on literature reviews or case studies, practitioners' point of view, as well as their experiences, are often neglected. Thus, their empirical knowledge on extension practice, which could provide interesting lessons learned or even innovative

approaches or new framings for old problems, is mainly wasted.

With the objective of drawing upon practitioners' experiences and insights, this paper will describe and analyze Argentine rural extensionists' point of view on how to be a good extensionist. Additionally, with the purpose of increasing the usefulness of the results, their contributions will be compared to the good practices and guidelines for rural extension proposed by scholars and international development organizations in order to identify similarities, differences and, in particular, contributions not taken into account by current literature on the subject.

## 2. Methodology

An exploratory-descriptive, qualitative research was conducted. Forty rural extensionists from the Argentine Northeastern provinces of Chaco, Corrientes, Formosa and Misiones were interviewed. All of them worked in the two most important rural extension institutions of the country, the National Institute of Agrarian Technology (INTA for its initials in Spanish) and the Secretary of Family Agriculture (SAF), both part of the Ministry of Agriculture, Husbandry and Fisheries.

Despite the fact that the INTA and the SAF are the largest and most well-known Argentine rural extension institutions, they are quite different. While the INTA is a consolidated and autarchic organization (created in 1956), with clear guidelines, the SAF is younger (created in 2009), politicized and often depends on the changing decisions of the institutional authorities, with no long-term policies. Both institutions have a widespread presence in all of the country. The INTA has more than 330 rural extension agencies, while the SAF has delegates in every province and development agents located throughout the rural areas.

The INTA aims at increasing competitiveness, social equity and environmental sustainability. Taking into account social, productive and institutional diversity, interventions are organized in terms of Regional Projects with a Territorial Approach, which articulates research, extension and different social demands identified through participatory processes. At a more local level, actions are supported by different, flexible types of projects developed jointly with groups of farmers. These include a variety of projects aimed at populations with alimentary needs, subsistence farmers, family farmers and medium farmers. Meanwhile, the SAF, in a context of lack of or irregular funding and of the politicization of national and even provincial authorities, dedicates itself to extension activities including classical technical assistance, support to commercialization, strengthening of farmer organizations and increase of quality of life (access to water, rural roads, etc.).

In each province, 5 extensionists from each institution were interviewed, 29 men and 11 women. Thirty five had university degrees while 5 did not, 36 had technical backgrounds (mostly agricultural engineers) and 4 backgrounds in social sciences. Participants were contacted using institutional telephone numbers available on the internet and information provided by previously interviewed extensionists.

Interviews were recorded and later transcribed and analyzed with Atlas Ti software. Firstly, fragments addressing how to be a good extensionist were highlighted, given that other issues had also been addressed. Next, following the recommendations of Taylor and Bodgan (1994), the texts were read several times and different dimensions or issues relating to good extension practice were identified through an inductive process. Some of them were more descriptive, while others included a higher degree of interpretation on the part of the researcher. Thirdly, these dimensions or issues relating to good extension practices were used to categorize all the interviews. After this, a review was conducted to confirm a consistent use of the categories, which implied checking that the

same definition had been used to organize all the fragments pertaining to each category. Next, all categories were classified into different, general thematic areas, which are expressed as subtitles in the Results section.

When a category of analysis related to a good extension practice is mentioned, the quantity of extensionists referring to it is indicated between brackets. This information should be interpreted in the context of a qualitative research and thus considered a reference, but not a quantitative result. Furthermore, even ideas mentioned by only a few extensionists are included in the description of results, if they are considered as having the potentiality for generating new ideas or interpretations. Given these statements are presented by the practitioners themselves, even when they are only pointed out by a few of them, they may be part of their interpretation repertoires (Long, 2001), which means that they could be used to make sense of different situations when the context induces their activation (Landini, 2013b).

## 3. Results

The interviewees address what is and how to be a good rural extensionist in different ways. In this process, they do not follow a clear or specific argumentative line. With the aim of making sense of the results obtained, practitioners' contributions are organized into different topics expressed as subtitles. In order to do so, the issue of the relationship between extension practice and context is addressed first, as well as different areas of intervention. Next, the knowledge and the attitudes required to be a good extensionist are approached in two different subtitles. Finally, the need to make sense of farmers' practices as a pre-requisite for successful interventions, the relationship that has to be built between producers and practitioners, and the processes of knowledge exchange that is expected to take place, are addressed.

### 3.1. Acknowledging diversity

When asked how to be a good extensionist, one interviewee replied: 'there are no recipes' (4), which implies that what a rural extensionist is or how to be a good one cannot be reduced to a technocratic procedure and will depend on a diversity of factors. Additionally, others argued that there also exists an array of different rural extensionists, institutional contexts and valid strategies and so, (5): 'it is not the same if I work with a cooperative or if I work for the INTA.' Thus, interviewees encourage the acknowledgment of the existing diversity of good extension practice, which will depend on the material, institutional, historical and personal context. This idea, while not always considered, supports Birner et al.'s arguments (2006), who consider that there is no best practice but instead good practices that could be useful depending on the circumstances.

### 3.2. Highlighted areas of intervention

The interviewees mentioned different lines of intervention that they considered as essential components of a good extension practice. They pertain to different areas but, in general terms, outline what extensionists do. Concretely, three lines of intervention were mentioned: interinstitutional articulation, strengthening farmers' organizations, and providing holistic advisory and support.

In line with most current expert literature's recommendations (Aguirre, 2012; Ortiz et al., 2011a; Ortiz et al., 2011b), research participants argued that rural extension requires articulation among different institutions and social actors (9), including 'others [practitioners] that are trying to do the same', as well as rural

development platforms wherein institutions and social actors concerned with rural development coordinate interventions and even discuss policy, thus providing synergy to their actions. Interestingly, this implies 'acknowledging one is neither the only one nor the first one doing this', leaving behind the idea of messianic interventions and institutions that are going to 'save' communities by themselves. In this case study, in contrast with most scholars' proposals, which are focused on the articulation between interventions or the development of policy consensus (Ortiz et al., 2011a), interviewees, in the context of budget limitations, strongly highlighted the importance of interinstitutional articulation so as to gather resources for projects (6): 'you have to be creative [...] if there is no money [in one's institution] you have to knock at any door'.

One interviewee argued that articulating with institutions in order to get economic resources is not the ideal strategy but 'there is no ideal situation'. This is interesting because rural extension experts' recommendations tend to be based on ideal situations, yet neglect to consider that they may not be real, or even plausible, in the context of a particular intervention. The answer is clear: a good extensionist has to achieve the best results within a real situation. Knowing what to do in ideal (but not real) situations will not lead to the best possible outcomes.

The interviewees, as well as scholars (e.g. Dirven, 2003; Qamar, 2011), highlighted the importance of building and strengthening farmers' organizations (6): 'in order to be a good extensionist and achieve good results, the central axis is [farmer] organization', 'the process of organization is much more interesting than the productive process, because when people [farmers] are organized, the rest comes by itself'. In this case, organizing farmers emerges as a way of contributing to the selling of their produce, in a context in which there exist difficulties when attempting to reach sufficient produce scale and negotiation power (Landini, 2007; Swanson, 2008). Additionally, and most importantly, organizing farmers is also a way to support their becoming social actors with the capacity to negotiate with governments and other market agents, which suggest a more political and less technocratic extension approach (Pérez and Clavijo, 2012).

In this vein, extensionists also mentioned the value of prioritizing group and institutional support over individual technical assistance (10). In a sense, it is because it increases the impact of the limited available human resources. Also, synergies and the possibilities of scaling up through farmers' organizations were an expected result of group work: 'the exchange of experiences within a group helps a lot!' Undoubtedly, working with farmers' groups is an excellent way to encourage horizontal knowledge exchange (Leeuwis, 2004). Either way, it does not imply rejecting work with individual farmers, given that specific contexts may require it. Additionally, the importance of accompanying farmers' groups and organizations and following up on projects was also pointed out as being a good practice (11): 'continuity is necessary in extension; it is not go once today and return six months later, you have to try to go every month or even every 15 days.' Thus, extension does not appear to be considered a practice consisting of a onetime intervention, but instead, one that continues through time, given interventions need time to stabilize (Lapalma, 2012).

Finally, besides acknowledging the importance of providing technical assistance, an issue that will be addressed later (see subtitle 3.7), extensionists also perceived the danger in considering that rural extension's only responsibility is to tackle productive and commercial problems (11): 'family agriculture is very complex; in order to address productive issues, you have to address the social aspects first'. Here, the proposal was not to change extensionists' profile to that of a social worker, but instead to think of rural development as an integral process involving multiple dimensions

and problems (Ortiz et al., 2011a; Preissing et al., 2014). However, when mentioned by extensionists, the idea of a holistic approach emerges as a necessity, an imposition of reality, and not as a question of freely framing practice. Again, having the flexibility to organize extension work so that it responds to what is needed emerges as a highly valuable asset.

### 3.3. Extensionists' education and complexity management

As mentioned before, extensionists' education is fundamental to addressing the complexity of rural development (Aguirre, 2012). Several interviewees addressed the topic of extensionists' education and knowledge (18). Some of them highlighted the importance of 'a solid education/training', as argued in relevant literature (Preissing et al., 2014; Sulaiman and Davis, 2012). However, they also recognized that technical knowledge was easily available nowadays so 'it is not necessary to have a person with a very high level of education'. In this line, there was widespread agreement that 'technical, academic training is important but not enough'. Additionally, social knowledge and interpersonal capabilities were deemed as being essential (8), including how to transmit knowledge, establish good relationships, manage groups and mediate conflicts. Moreover, different extensionists pointed out the importance of having the capacity to effectively deal with power relationships between institutions, conflicting interests and political clientelism (8). One interviewee presented this problem:

I have to deliver [free chicks to small farmers] and the local mayor finds out, he phones and tells you 'why did you do it? To deliver here, you have to call me first' [...]. We also deliver to his group, but they get jealous [...] and then it depends on your resourcefulness, because you cannot clash [...] you can tell him 'we cannot fight over 30 chicks, next delivery I'm going to arrange with you'.

Interestingly, practitioners agreed with the academic literature on the matter, which states that technical knowledge is not enough to provide quality rural extension (GFRAS, 2010; Ortiz, 2009; Swanson, 2008). However, as opposed to what experts state, they highlighted the importance of interpersonal skills, and even prioritized social over technical knowledge, perhaps due to their perceiving personal limitations in said area, as Swanson (2008) suggests. At the same time, they also demonstrated, again, that they had a significant share of realism when pointing out the need for skills to deal with less than ideal situations, such as power relationships and political clientelism, areas not mentioned in the scholarly literature reviewed.

Additionally, given the multiple and diverse set of knowledge and capabilities required to be a good extensionist, some interviewees highlighted the importance of an interdisciplinary approach (6), as is argued by various scholars (Carballo, 2002; Landini and Bianqui, 2014; Ortiz et al., 2011a). In this line, practitioners argued that the body of knowledge and capabilities required for extension practice did not need to be encompassed by one, individual extensionist, but instead by an interdisciplinary group, thus creating the possibility for the discussion regarding distributed knowledge and group synergies: 'not all of us are going to have the same vision and the same way of solving it, and this is what enriches the work'.

Interestingly, the proposal for interdisciplinary extension teams opens a new possibility for thinking about rural extensionists' learning processes. An interviewee suggested: 'it is important to have contact with others [...] to listen to how they manage certain issues or how they face specific problems [...]. Exchanging with other people helps.' Thus, one could say that having the possibility

to interact and exchange with others about practice could increase the ability of rural extensionists to analyze and face complex, practical problems (Gazzoli, 2012). However, despite this interesting argument, most extension experts seem to neglect this potentiality of interdisciplinary work, instead focusing their attention only on its usefulness for direct actions.

### 3.4. Key attitudes for extension work

Rural extension not only calls for extensionists with solid knowledge and capabilities in different areas, but also ones that have the necessary attitude for working fruitfully and bonding with people (Landini et al., 2009). During the interviews, most extensionists pointed out the importance of the technicians having certain personal and humane characteristics (22): 'a good extensionist is one who knows people and knows how to reach farmers [...] the relationship with people is fundamental'. Several key attitudes and extensionists' personal characteristics were mentioned during the interviews. The first highlights the importance of 'listening to others' (16). Here, 'listening' refers to the personal attitude of paying attention to the others' beliefs and worries. Secondly, being a good extensionist also requires being truthful, clear, responsible and sincere with farmers (12). In a context where political clientelism frames many social practices (Landini, 2013c), in which small farmers are usually blatantly lied to, speaking the truth is greatly appreciated: 'I think people value it, being sincere, they value it a lot'.

Long (2015) has recently pointed out how the emergence of certain emotions experienced in interpersonal interactions may frame situations and lead to specific interactive paths. When analyzing these results, we could think that the expression of humane characteristics, the sincerity and the trustworthiness, among other factors, could induce the activation of similar emotions and attitudes in the farmers, thus opening fertile, symmetric and interactive communicational patterns that create new opportunities for change and innovation (Leeuwis and Aarts, 2011).

Additionally, humility, here considered an expression of the feeling that extensionists and farmers are equally important and are on the same level, was also considered a prerequisite to being a good extensionist (6), something highlighted by Freire (1973) several decades ago but scarcely incorporated into the context of extension theory. Fourthly, some interviewees mentioned the usefulness of not having rigid or extremist positions with regards to productive practices and extension strategies (7), which would allow them to find the best strategy for each situation (Ortiz et al., 2011a). In this sense, one extensionist argued that working with farmers' groups is not always viable when they live very far away, and others highlighted that transferring technologies and exchanging knowledge horizontally were not opposed but instead depended on the group and on the context. Thus, the argument is that being inflexible in these situations will become an obstacle to obtaining the best possible results. Likewise, some practitioners pointed out the importance of being open-minded and going beyond preconceptions (9) in order to understand farmers and find the best alternatives: 'you have to leave behind the preconceptions that you have as a person [...] in order to see why farmers act in this way'. Certainly, overcoming preconceptions and having an ample repertoire of different extension strategies and methodologies (Ortiz, 2009) would facilitate finding the best fit for a particular situation (Birner et al., 2006).

Finally, interviewees also mentioned that extensionists had to be committed to the farmers and/or to the territory so as to obtain good results (14). In this sense, being a good extensionist required framing practice in terms of values and not as a simple way of making your living: 'it is something personal as well as

professional'. As organizational psychology shows, practitioners' commitment increases dedication, responsibility and, in the end, results (Klein et al., 2012).

### 3.5. Understanding farmers as a key strategy

The traditional, diffusionist rural extension is based on expert knowledge and its way of understanding production, market, and even human aims. Thus, others' ways of knowing, as well as the possibility of having different goals in life, tend to be neglected, which leads to poor extension results. Peasants in particular, but also family farmers, have a different rationale that cannot be understood only by means of expert technical knowledge and the market's assumptions on human behavior (Landini, 2011).

In this sense, most extensionists conceived understanding farmers, their context, and their culture as a structural element of a good rural extension (26). Failing to do so usually led to out of context technical proposals: 'the technological offer has to fit their productive rationale [...] if you go against it, it's like crashing into a wall'. Thus, understanding farmers emerges as a pragmatic need, because not understanding is equal to failing. In this context, the importance that practitioners gave to listening to farmers and being open-minded so as to understand others' point of view makes much more sense. Additionally, this argument also suggests extensionists cannot be simple technocrats who recommend rigidly standardized technical practices: 'if you are a technocrat [...] and are incapable of doing this analysis, by no means are you going to impulse this sector [family farmers]'. However, this is what is usually done when the transfer of predefined technologies is the focus of extension work rather than trying to support innovation processes. On the contrary, and as argued above, practitioners have to be flexible enough to adapt to proposals tailored specifically for a particular environmental and social context (Paz et al., 2010).

Understanding farmers encompasses different dimensions. The first one is the farmers' productive rationale and culture. What do farmers want? How is this related to their history and identity? What are their expectations, goals and illusions? One interviewee demonstrated this: 'he is fighting against bush and jungle. He wants grass for his animals. If he sees straw, he puts it into fire to get grass. Culturally, he fights against bush and jungle. You [as an extensionist] cannot go against it.' The second dimension refers to the availability of resources and farmers' immediate context of life. Do they have money to buy modern tools? Is there a market for a specific product? Again, examples are illustrative: 'you ask him to buy 10 m of hose and he doesn't have enough money to take his child to the doctor [...] in general, we don't see the context'. Finally, extensionists also have to take into account the wider context, including political, economic and social issues. Is the government supporting family farming? Does a specific policy for selling produce or supporting cooperatives exist? In brief, practitioners seem to highlight the importance of a holistic, and not merely productive, understanding (Preissing et al., 2014), which also includes the commercial, social, cultural and ethnical dimensions of farmers' practice (Ortiz et al., 2011a).

Finally, there are other interesting matters regarding understanding farmers. Firstly, it is a process, not a onetime action or acknowledgment. It takes time and extensionists should use it in order to build the trust necessary towards generating a truly dialogic exchange: 'it isn't that from one day to another the farmer sees you and starts talking about everything [...] slowly he is going to tell you technical and personal stuff, which may lead you to understand how his farm functions'. Secondly, having grown up in the area was regarded as highly valuable, as it gives additional tools for understanding why farmers do what they do: 'I was raised in the area, so I know more or less everything'. In the same line, being of

the area also meant sharing a social identity, thus inducing sympathy and positive attitudes, as social identity theory argues (Tajfel, 1984). Lastly, understanding does not mean accepting every farmer's expectation or request, given that this would imply not making any contribution. Producers do not want extensionists to always say yes to their opinions; they just do not want differences to become inequalities (Landini, 2010). In this context, a fair disagreement does not appear to be a setback, but rather a way of producing innovations that include scientific knowledge and farmers' experiences, contexts and rationales. This is, making of differences opportunities for innovation.

### 3.6. Farmer-extensionist relationship

Different authors have mentioned communication problems in the context of the farmer-extensionist relationship (Ingram, 2008; Landini and Murtagh, 2011). Thus, building a strong, personal relationship between both appeared as being a highly valuable, yet many times neglected, component of good extension practice, as it allows them to 'reach' producers: 'building a good relationship with people ... without it, it is very complicated'. In fact, while explaining how to be a good extensionist, most practitioners talked about the development of trust between farmers and extensionists and its importance (29). Interestingly, trust appears as one of the most important foundations of cooperative behavior (Cegarra Navarro et al., 2005; Tanghe et al., 2010). Thus, building trust in the farmer-extensionist relationship constitutes a fundamental step towards collaborative work and, eventually, towards innovation.

Building trust and constructing an interpersonal relationship takes time and requires patience, because it entails the repetition of situations in which trust is respected and not betrayed (Luhmann, 1996). In this process, extensionists' personality and traits are essential (their 'quality as a person'). As it was argued, practitioners have to be sincere, good listeners, empathetic and responsible, all characteristics that provide information about the extensionists and their trustworthiness (García et al., 2005).

Additionally, interviewees also pointed out the importance of establishing a horizontal relationship, wherein extensionists and farmers, despite their differences, were on the same level as persons (i.e. have the same value) (17): 'you have to be humble, simple, not feel like you are more'.

The practitioners described certain procedures for this process of building trust. They included going to the field to visit farmers and talking with them. The nature of this talking was of utmost importance and was focused not on farming but life in general: 'perhaps you spend hours in their home talking about anything but production'. And only then was it possible to go to the farm: 'you have to listen to all the problems he has [...] and then go to the farm.' Clearly, this relationship goes beyond a merely professional one for both parties involved. However, it also constitutes a prerequisite for obtaining highly valuable extension results due to the importance of trust and cooperation in the innovation process.

### 3.7. Knowledge dynamics and strengthening of practices

The exchange, transference and/or collective construction of knowledge, as well as the change and improvement of productive, organizational and commercial practices, is at the core of rural extension. With regard to these issues, the interviewees presented different ideas for a good rural extension practice. They highlighted the importance of a proper pedagogical approach (16). Rural extension is not a simple question of providing knowledge and giving recommendations. The key question is how to do it: 'he has to be a good teacher, to transmit concepts clearly.' Extensionists are

not only technical advisors but also educators, thus should have knowledge of adult pedagogy (Leeuwis, 2004). In this line, extensionists argued that the use of simple, colloquial vocabulary, and the implementation of practical (and not only theoretical) training seem to be quite interesting strategies.

Within these 'knowledge dynamics' the practitioners pointed out several crucial aspects. Firstly, when interacting with farmers, their knowledge has to be recognized, acknowledged (14): 'you always [have to] value what he [the farmer] does', 'they have much to teach you'. Respecting farmers' practical knowledge emerges as the starting point for a good rural extension practice. Secondly, recommendations and technical proposals have to be based on what farmers do, always taking into account their productive rationale (13) because, if not, results are going to be insufficient: 'often I use what they know to see how we can technically improve it, starting from what they know'. In this line, generating proposals that fit farmers' productive rationale is imperative. Thirdly, participation, as well as taking into account the farmers' interests and felt needs, emerged as clues for sustainable improvements in productive, commercial and organizational practices (12): 'when the farmer is not interested [...] you come with a project and people are going to receive it, and you leave and the project is going to fail because there wasn't true interest'. In brief, extensionists seemed to depict their work as a dynamic process of interaction wherein social learning and innovation are more likely to occur (Leeuwis, 2004).

Additionally, rural extensionists also argued that the strengthening of practices is not only a question of knowledge but also of providing tools and strategies for autonomy (16): '[we want] to generate capacities [...] so that when one isn't there anymore, they are able to solve their problems without us.' In this sense, providing tools for autonomy is key, which involves, among other things, developing strong farmers' organizations, supporting collective reflection processes on practical problems and building reflective capacity. Concretely, the idea of contributing to reflection (7) seems interesting, given it is not commonly mentioned by international development organizations. Interestingly, all of these proposals go in line with experts' recommendations that support the idea of strengthening farmers' organizations (Dirven, 2003) and developing their capacities to face problems (Ortiz, 2009; Pérez and Clavijo, 2012).

Many extensionists also addressed the process of the transferring/exchanging of knowledge (17). In order to make sense of what is considered a good rural extension practice in this area, three elements have to be taken into account: the trust between farmers and practitioners as a prerequisite for a positive interaction; farmers possessing valid and valuable knowledge; and extension proposals fitting the farmer's context and rationale. By framing rural extension in this way, the best knowledge dynamics between both actors, and the one that was most widely supported by the practitioners, was one that is a horizontal, dialogical interchange of knowledge, experiences and opinions, quite distant from a traditional school class: 'exchanging knowledge, and not coming and "dropping" a recipe'. Furthermore: 'I believe that knowledge is generated in this interchange, that the truth is built by all: it isn't either what I say nor what you [as a farmer] say, but what we can build'. An interviewee described this process eloquently, as a 'negotiation of technologies', a process wherein local, practical knowledge is combined with scientific information. Interestingly, the extensionists pointed out that a diffusionist, top-down approach is simply not going work: 'you are going to leave, and the farmer is not going to do it, because what you gave him is a recipe'. In this context, horizontal learning (i.e. exchange of knowledge among farmers), emerges as an interesting strategy.

Some years ago, Leeuwis (2004) argued that the linear,

top–down model of innovation did not really exist because, even though it was supported by extensionists, when processes were analyzed more in depth, it was noted that deviations and changes in this pattern were the rule and not the exception. Thus, drawing from experience, the interviewees seemed to have reached the same conclusion: innovation is not the result of the transfer of technologies but of learning and of exchanging knowledge.

Now, despite the fact that this interactive approach advises against rejecting farmer's knowledge, it does not support the idea of accepting invalid knowledge. Instead of rejecting it, the approach proposes putting it up for reflection and discussion, or simply putting the new proposal into practice to see what happens: 'a good extensionist [...] cannot go against farmers' beliefs, in any case, he can try modifying, exchanging and re-analyzing.'

#### 4. Discussion

The practitioners presented several contributions for achieving a good rural extension practice. In many aspects, they agreed with the academic literature on the subject. In the [Introduction](#) eleven critical factors, found in said literature, for increasing the quality and impact of rural extension, were briefly presented. During the [Results](#) section, eight of them were addressed in roughly similar terms by the interviewees: extensionists with high levels of education and the implementation of an interdisciplinary approach (Section 3.3), the importance of participation (Section 3.7), support for farmers' groups and organizations (including accompanying and monitoring of projects), interinstitutional articulation (Section 3.2), horizontal communication with farmers (Sections 3.6 and 3.7), and acknowledgment of diversity (Section 3.1).

Nonetheless, with regards to these factors, some specific differences were found. When talking about practitioners' knowledge, interviewees underlined the importance of social and interpersonal skills, over technical ones, while academic literature on the subject tends to put both at the same level or even prioritize the latter. With regards to an interdisciplinary approach, extensionists pointed out the usefulness of interdisciplinary groups, not only for tackling the complexity of practice, but also as learning spaces, which is an interesting insight. Regarding monitoring and evaluation of projects, the interviewees only addressed the importance of monitoring, expressing it as 'accompanying groups', but not of evaluation. In the area of interinstitutional articulation, despite many agreements between the interviewees and the bibliography consulted, the former highlighted its importance in the process of obtaining recourses, something mentioned in academic literature ([Ortiz et al., 2011a](#)) but not with the same insistence. In any case, its appearance in the interviews makes perfect sense if considered that the interviewees deal regularly with a lack of resources. Regarding the importance of horizontality in the relationship between farmers and extensionists, while literature on the subject tends to address the topic in terms of extension models and innovation dynamics (see [Freire, 1973](#); [Leeuwis, 2004](#); [Pérez and Clavijo, 2012](#)), extensionists draw upon their experience and point out the value of trust building, interpersonal skills and understanding farmers' rationale.

One of the remaining critical factors for quality rural extension, articulation between research and extension, may not have been mentioned due to the fact that practitioners' recommendations were focused more on an interpersonal level of analysis. Nonetheless, the lack of reference to the importance of gender issues and environmental sustainability seems striking, and even disturbing. Does it mean that they were not relevant enough to be mentioned during the interviews? This research cannot reply this question. However, it does raise concerns on the importance given to these factors by local practitioners.

Additionally, there are other differences between the bibliography and the extensionists' point of view on how to be a good extensionist, differences that transcend merely the content of these critical factors. In fact, the differences between the ways in which each one frames their contributions are quite remarkable. On the one hand, the guidelines and critical factors pointed out by extension experts and international institutions tend to be supported by multiple case studies and focused on best practices at the level of extension projects or policies (e.g. [Pérez and Clavijo, 2012](#); [Qamar, 2011](#); [Swanson, 2008](#)). On the contrary, extensionists tend to draw upon their own experience and develop proposals more concerned with interpersonal interactions and with overcoming practical problems in real (and not ideal) settings, for instance, on how to deal with political clientelism and the scarcity of extensionists.

Two strong implications derive from this. Firstly, available literature on good practices by international institutions and extension experts may not be of interest for practitioners, given it does not always (and perhaps not usually) address their needs, which include dealing with practical problems of a more interpersonal nature as well as with real, and not ideal, situations. Secondly, because of their having a different approach, extensionists may make contributions for a good extension practice that have not been previously highlighted.

In this vein, interviewees presented several ideas on good rural extension practice that are not commonly seen in academic literature. Firstly, there are no recipes for a good extension practice. Of course, it is implicit in arguments in favor of good practices over best practice ([Christoplos et al., 2012](#)) or in the need for choosing extension methods specific to the characteristics of the territory and the beneficiaries ([Nederlof et al., 2008](#)). However, when the importance given by the interviewees to understanding farmers' rationale and to extensionists' interpersonal skills is taken into consideration, the idea that 'there are no recipes' reaches a depth not usually acknowledged and that reveals the creativity factor required to be a good extensionist.

Secondly, the extensionists' recommended guidelines tend to be highly pragmatic, in the sense of providing tools or strategies to deal with real (not ideal) situations, which are usually not taken into consideration within international institutions' recommendations. Here, the question is not how to produce the best rural extension in general, but how to get the best of the rural extension we have.

Additionally, interviewees highlighted the crucial importance of personal attitudes and knowledge of the social sciences for a good rural extension practice, while in a way limiting the relevance of a high-level technical expertise. Interestingly, this adds personal attitudes as an important asset for extensionists ([Landini et al., 2009](#)) and puts up for discussion the emphasis that is usually placed on technical proficiency (e.g. [Dourojeanni, 2000](#); [Preissing et al., 2014](#)).

Fourth, in the context of a horizontal communication between extensionists and farmers, practitioners' personal attitudes are presented as fundamental, as this type of relationship requires respecting and valuing farmers' knowledge, experiences and points of view. In this context, best agricultural practices do not appear as the result of a transference process, but instead a 'negotiation of technologies' wherein different points of view are discussed and contextually evaluated. Usually, academic literature points out the importance of practitioners facilitating a horizontal exchange of knowledge ([Leeuwis, 2004](#)). Here, extensionists mention some personal preconditions to such practice.

Fifth, acknowledging the importance of participatory processes does not mean always accepting farmers' demands and expectations, given that in a horizontal relationship farmers' point of view is complemented with that of the extensionists'. Interestingly,



when a demand-driven or a participatory approach is mentioned in academic literature, the emphasis is placed on describing the procedure or the approach (e.g. Landini et al., 2009; Trigo et al., 2013; Qamar, 2011). However, rarely is anything said on how to deal with the differences between the point of view of external experts and communities, an issue that was addressed by the interviewees.

Finally, and also in the context of this pragmatic framing proposed by the extensionists, rural extension seems unable to reach its goals without considering and addressing other problems faced by rural communities such as water availability, housing and education, among others, thus suggesting that there needs to be a change in practitioners' profiles from extensionists to rural development agents. Again, in a sense, this may be implied when scholars recommend a holistic approach to rural extension (e.g. Bifani, 2001; Preissing et al., 2014). Nonetheless, what makes this a new contribution is that not only a holistic understanding seems to be needed, but also interventions that address different areas of farmers' wellbeing.

## 5. Conclusion

In general terms, academic literature has not addressed good extension practices from extensionists' point of view. Thus, in this paper, their experiences and insights on how to be a good extensionist were analyzed and compared to scholars' recommendations.

The extensionists argued that good extension practice cannot be standardized, given it depends on a diversity of context-dependant factors. They highlighted the importance of three areas of extension work: interinstitutional articulation, strengthening of farmers' organizations, and provision of holistic advisory services. In this vein, practitioners pointed out that rural extension has to go beyond productive and commercial support, and that good extensionists have to be proficient in both agricultural and social sciences, in order to be able to address the complexity of development processes, a factor that also highlights the pertinence of interdisciplinary approaches.

Additionally, personal attitudes and capabilities for working fruitfully and bonding with people were deemed essential in order to be a good extensionist, which includes openness to listening to others, and being sincere, trustworthy, humble, flexible and committed to farmers, among other characteristics. In this line, practitioners also highlighted the importance of understanding farmers, their context, and their culture, as a way to develop productive and dynamic horizontal interactions based on mutual trust and respect. With regards to the farmer-extensionist interaction, practitioners emphasized the need for valuing farmers' knowledge and of jointly building solutions and even innovations that fit farmers' rationale and context. In this sense, participatory processes arose as a key extension tool, although accompanied by the acknowledgement that participation does not always imply accepting farmers' demands and points of view.

In general terms, scholars and extensionists tend to highlight similar ideas and factors when describing good extension practices, with the difference that the interviewed practitioners did not mention the importance of gender issues and environmental sustainability. Nonetheless, some differences in emphasis and framing were found. Among them was that extensionists gave more relevance than scholars to interpersonal skills, trust building, and to the need to look for economic resources. Additionally, with regards to the differences in their approaches and perspectives, it is clear that scholars tend to present proposals based on research and case studies and to think in terms of ideal practices, while extensionists draw upon their experiences and highlight recommendations more concerned with interpersonal interactions and aimed at addressing

the complexities of real contexts of practice. These differences are important because they show that how experts frame extension practice does not necessarily coincide with extensionists' rationale for addressing said practice.

In summary, this research drew upon extensionists' experiences and practical knowledge in order to identify key components for a good, effective rural extension practice, thus contributing to existing literature on rural social science. Likewise, comparing extensionists' recommendations to experts' and scholars' proposals allowed us to identify the factors that make practitioners' contributions to the field distinctive, as well as the particularities of how they frame good extension practice.

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## References

- Acunzo, M., Pafumi, M., Torres, C., Tirol, M., 2014. Communication for Rural Development. FAO, Rome (accessed 18.07.15.). <http://www.fao.org/3/a-i3492e.pdf>.
- Aguirre, F., 2012. El nuevo impulso de la extensión rural en América Latina. Situación actual y perspectivas. Red Latinoamericana para Servicios de Extensión Rural, Santiago (Chile) (accessed 18.07.15.). <http://www.redinnovagro.in/documentosinnov/nuevoimpulso.pdf>.
- Bifani, P., 2001. Costa Rica. In: FAO (Ed.), From Farmer to Planner Back. Harvesting Best Practices. Case Studies from Latin America and Asia. FAO, Rome (accessed 18.07.15.). [http://www.fao.org/docrep/005/Y0351E/y0351e02.htm#P0\\_0](http://www.fao.org/docrep/005/Y0351E/y0351e02.htm#P0_0).
- Birner, R., Davis, K., Pender, J., Nkonya, E., Anandajayasekaram, P., Ekboir, J., Mbabu, A., Spielman, D., Horna, D., Benin, S., Cohen, M., 2006. From "Best Practice" to "Best Fit": a Framework for Analyzing Pluralistic Agricultural Advisory Services Worldwide. International Food Policy Research Institute, Washington (accessed 18.07.15.). <http://www.ifpri.org/sites/default/files/publications/dsgdp37.pdf>.
- Carballo, C., 2002. Extensión y transferencia de tecnología en el sector agrario argentino. School of Agronomy, University of Buenos Aires, Buenos Aires.
- Cegarra Navarro, J., Briones Peñalver, A., Ros Sánchez, M., 2005. La confianza como elemento esencial para la mejora de la cooperación entre empresas: un estudio empírico en PyMES. Cuad. Adm. 18 (30), 79–98 (accessed 26.07.15.). [http://www.scielo.org.co/scielo.php?script=sci\\_arttext&pid=S0120-35922005000200004&lng=en&tlng=es](http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0120-35922005000200004&lng=en&tlng=es).
- Chambers, R., 1983. Rural Development. Putting the Last First. Longman, New York.
- Christoplos, I., Sandison, P., Chipeta, S., 2012. Guide to Evaluating Rural Extension. GFRAS, Lindau (Switzerland) (accessed 18.07.15.). <http://www.g-fras.org/en/knowledge/gfras-publications/file/78-guide-to-extension-evaluation.html?start=20>.
- Dirven, M., 2003. Entre el ideario y la realidad: capital social y desarrollo agrícola, algunos apuntes para la reflexión. In: Atria, R., Siles, M., Arriagada, I., Robison, L., Whiteford, S. (Eds.), Capital social y reducción de la pobreza en América Latina y el Caribe: en busca de un nuevo paradigma. Economic Commission for Latin America and the Caribbean (ECLAC), Santiago (Chile) (accessed 18.07.15.). [http://repositorio.cepal.org/bitstream/handle/11362/2324/S029693\\_es.pdf?sequence=1](http://repositorio.cepal.org/bitstream/handle/11362/2324/S029693_es.pdf?sequence=1).
- Dourojeanni, A., 2000. Procedimientos de gestión para el desarrollo sustentable. ECLAC, Santiago (Chile) (accessed 18.07.15.). [http://repositorio.cepal.org/bitstream/handle/11362/5564/S0008667\\_es.pdf?sequence=1](http://repositorio.cepal.org/bitstream/handle/11362/5564/S0008667_es.pdf?sequence=1).
- Freire, P., 1973. Extensión o comunicación? La concientización en el medio rural. Siglo XXI, Buenos Aires.
- Friedrich, T., 2014. Marco teórico: Intensificando la producción de manera sostenible. In: Salcedo, S., Guzmán, L. (Eds.), Agricultura familiar en América Latina y el Caribe: Recomendaciones de política. FAO, Santiago (Chile) (accessed 18.07.15.). <http://www.fao.org/docrep/019/i3788s/i3788s.pdf>.
- García, A., Díaz, A., Delgado, M., Grajales, T., 2005. La confianza interpersonal. Validez de constructo y factores relacionados. Memorias Cent. Investig. Educ. 6 (1), 95–111 (accessed 13.07.15.). <http://ojs.um.edu.mx/index.php/memorias/article/view/82>.
- Gazzoli, P., 2012. Comunidades de práctica enquanto viabilizadoras de projetos comuns em ambientes turbulentos: uma abordagem crítica. Rev. Adm. Contemp. 16 (6), 806–826. <http://dx.doi.org/10.1590/S1415-65552012000600004>.
- GFRAS (Global Forum for Rural Advisory Services), 2010. Five Key Areas for Mobilising the Potential of Rural Advisory Services. GFRAS, Lindau (Switzerland) (accessed 18.07.15.). <http://www.g-fras.org/en/knowledge/gfras-publications/file/4-five-key-areas-for-mobilising-the-potential-of-rural-advisory-services>.

- html.
- IFAD, 2009. Sustainability of Rural Development Projects. Best Practices and Lessons Learned by IFAD in Asia. IFAD (accessed 18.07.15.). <http://www.ifad.org/operations/projects/regions/pi/paper/8.pdf>.
- Ingram, J., 2008. Agronomist-farmer knowledge encounters: an analysis of knowledge exchange in the context of best management practices in England. *Agric. Hum. Values* 25, 405–418. <http://dx.doi.org/10.1007/s10460-008-9134-0>.
- Klein, H., Molloy, J., Brinsfield, C., 2012. Reconceptualizing workplace commitment to redress a stretched construct: revisiting assumptions and removing confounds. *Acad. Manag. Rev.* 37 (1), 130–151. <http://dx.doi.org/10.5465/amr.2010.0018>.
- Klerkx, L., van Mierlo, B., Leeuwis, C., 2012a. Evolution of systems approaches to agricultural innovation: concepts, analysis and interventions. In: Darnhofer, I., Gibbon, D., Dedieu, B. (Eds.), *Farming Systems Research into the 21st Century: the New Dynamic*. Springer, Dordrecht, The Netherlands.
- Klerkx, L., Schut, M., Leeuwis, C., Kilelu, C., 2012b. Advances in knowledge brokering in the agricultural sector: towards innovation system facilitation. *IDS Bull.* 43, 53–60. <http://dx.doi.org/10.1111/j.1759-5436.2012.00363.x>.
- Landini, F., Bianqui, V., 2014. Socio-demographic profile of different samples of Latin American rural extensionists. *Ciencia Rural* 44 (3), 575–581. <http://dx.doi.org/10.1590/S0103-84782014000300030>.
- Landini, F., Murtagh, S., 2011. Prácticas de extensión rural y vínculos conflictivos entre saberes locales y conocimientos técnicos. In: *Contribuciones desde un estudio de caso realizado en la provincia de Formosa (Argentina)*. Ra Ximhai, 7, pp. 263–279 (accessed 27.07.15.). <http://www.revistas.unam.mx/index.php/rxm/article/view/26684>.
- Landini, F., Murtagh, S., Lacanna, M., 2009. Aportes y reflexiones desde la psicología al trabajo de extensión con pequeños productores. INTA, Formosa (Argentina) (accessed 18.07.15.). [www.agro.unlp.edu.ar/cursos/mod/resource/view.php?id=4280](http://www.agro.unlp.edu.ar/cursos/mod/resource/view.php?id=4280).
- Landini, F., Bianqui, V., Russo, M., 2013. Evaluación de un proceso de capacitación para extensionistas rurales implementado en Paraguay. *Rev. Econ. Sociol. Rural* 51 (Suppl. 1), s009–s030. <http://dx.doi.org/10.1590/S0103-20032013000600001>.
- Landini, F., 2007. Prácticas cooperativas en campesinos formoseños. *Problemas y alternativas*. *Rev. Fac. Agron.* 27 (2), 173–186.
- Landini, F., 2010. Ingenieros extensionistas formoseños desde la mirada de los pequeños productores: representaciones, expectativas y realidades. *Mundo Agrar.* 10 (20) (accessed 24.07.15.). <http://www.scielo.org.ar/pdf/magr/v10n20/v10n20a06.pdf>.
- Landini, F., 2011. Racionalidad económica campesina. *Mundo Agrar.* 12 (23) (accessed 18.07.15.). <http://www.scielo.org.ar/pdf/magr/v12n23/v12n23a14.pdf>.
- Landini, F., 2013a. Necesidades formativas de los extensionistas rurales paraguayos desde la perspectiva de su función, sus problemas y sus intereses. *Trab. Soc.* 20, 149–160 (accessed 18.07.15.). <http://www.scielo.org.ar/pdf/tys/n20/n20a10.pdf>.
- Landini, F., 2013b. Peasants' social representation of politicians in a clientelist rural context. *J. Community Appl. Soc. Psychol.* 23 (2), 115–127. <http://dx.doi.org/10.1002/casp.2105>.
- Landini, F., 2013c. Peasants' social representation of politicians in a clientelist rural context. *J. Community Appl. Soc. Psychol.* 23 (2), 115–127. <http://dx.doi.org/10.1002/casp.2105>.
- Lapalma, A., 2012. Psicología comunitaria. Niveles múltiples en los procesos de intervención comunitaria. In: Zambrano, A., Berroeta, E. (Eds.), *Compiladores, Teoría y práctica de la acción comunitaria*. Ril Editores, Santiago (Chile).
- Leeuwis, C., Aarts, N., 2011. Rethinking communication in innovation processes: creating space for change in complex systems. *J. Agric. Educ. Ext.* 17 (1), 21–36. <http://dx.doi.org/10.1080/1389224X.2011.536344>.
- Leeuwis, C., 2004. *Communication for Rural Innovation. Rethinking Agricultural Extension*. Blackwell Science, Oxford.
- Long, N., 2001. *Development Sociology. Actor Perspectives*. Routledge, London.
- Long, N., 2015. Acercando las fronteras entre la antropología y la psicología para comprender las dinámicas de desarrollo rural. In: Landini, F. (Ed.), *Hacia una psicología rural latinoamericana*. CLACSO, Buenos Aires (accessed 24.07.15.). [http://biblioteca.clacso.edu.ar/clacso/se/20150213020711/Hacia\\_una\\_psicologia\\_rural.pdf](http://biblioteca.clacso.edu.ar/clacso/se/20150213020711/Hacia_una_psicologia_rural.pdf).
- Luhmann, N., 1996. *Confianza*. Anthropos, Barcelona.
- Méndez, M., 2006. Los retos de la extensión ante una nueva y cambiante noción de lo rural. *Revista Facultad Nacional de Agronomía*. Medellín 59, 3407–3423.
- Nederlof, E., Wennink, B., Heemskerck, W., 2008. Access to Agricultural Services. Royal Tropical Institute, Amsterdam (accessed 18.07.15.). <http://www.ifad.org/rural/rpr2010/background/3.pdf>.
- Ortiz, R., Mejía, F., Ceville, X., Preissing, J., Boerger, V., Solórzano, N., Meyrat, M., Marín, X., Morrás, E., 2011. Buenas prácticas en el manejo de extensión en América Central. FAO, Rome (accessed 18.07.15.). [http://www.fao.org/uploads/media/AMERICAN\\_CENTRALxWEB\\_1.pdf](http://www.fao.org/uploads/media/AMERICAN_CENTRALxWEB_1.pdf).
- Ortiz, R., Rivera, O., Cifuentes, I., Morrás, E., 2011. Estudio de sistematización de buenas prácticas de extensión en Guatemala. FAO, Guatemala (accessed 18.07.15.). [http://coin.fao.org/coin-static/cms/media/9/13155827018300/sistematizacion\\_buenas\\_practicas\\_de\\_extension\\_final.pdf](http://coin.fao.org/coin-static/cms/media/9/13155827018300/sistematizacion_buenas_practicas_de_extension_final.pdf).
- Ortiz, R., 2009. Evolución de los servicios de extensión en Nicaragua. FAO, Rome (accessed 18.07.15.). <ftp://ftp.fao.org/docrep/fao/012/i1287s/i1287s.pdf>.
- Paz, R., Rodríguez, R., González, V., Lipshitz, H., 2010. Producción económica en una pequeña explotación lechera caprina: hacia un diseño alternativo de desarrollo rural. *Arch. Latinoam. Prod. Anim.* 18 (3–4), 97–111 (accessed 24.07.15.). [http://www.produccion-animal.com.ar/produccion\\_caprina/leche\\_caprina/35-18vol3-4\\_Paz.pdf](http://www.produccion-animal.com.ar/produccion_caprina/leche_caprina/35-18vol3-4_Paz.pdf).
- Pérez, M., Clavijo, N., 2012. Experiencias y enfoques de procesos participativos de innovación en agricultura. El caso de la corporación PBA en Colombia. FAO, Rome (accessed 10.07.15.). <http://www.fao.org/3/a-i3136s.pdf>.
- Preissing, J., Ardila, S., Buitrón, J., Fernández, C., 2014. Nuevas inversiones en extensión para la agricultura familiar. In: Salcedo, S., Guzmán, L. (Eds.), *Agricultura familiar en América Latina y el Caribe: Recomendaciones de política*. FAO, Santiago (Chile) (accessed 18.07.15.). <http://www.fao.org/docrep/019/i3788s/i3788s.pdf>.
- Qamar, K., 2011. Introducing Demand-driven Extension Approach in a Traditional Region: a Case Study from Pakistan. FAO, Rome (accessed 18.07.15.). <http://www.fao.org/3/a-i2354e.pdf>.
- Rogers, E., 1962. *Diffusion of Innovations*. Free Press, New York.
- Sulaiman, R., Davis, K., 2012. The “New Extensionist”: Roles, Strategies, and Capacities to Strengthen Extension and Advisory Services. GFRAS, Lindau (Switzerland) (accessed 18.07.15.). <http://www.g-fras.org/en/knowledge/gfras-publications/file/126-the-new-extensionist-position-paper?start=20>.
- Swanson, B., 2008. Global Review of Good Agricultural Extension and Advisory Service Practices. FAO, Rome (accessed 18.07.15.). <http://www.fao.org/3/a-i0261e.pdf>.
- Tajfel, H., 1984. *Human Groups and Social Categories*. Cambridge University, Cambridge.
- Tanghe, J., Wisse, B., van der Flier, H., 2010. The role of group member affect in the relationship between trust and cooperation. *Br. J. Manag.* 21 (2), 359–374. <http://dx.doi.org/10.1111/j.1467-8551.2009.00643.x>.
- Taylor, S., Bodgan, R., 1994. *Introducción a los métodos cualitativos de investigación. La búsqueda de significados*. Paidós, Barcelona.
- Trigo, E., Mateo, N., Falconi, C., 2013. Agricultural Innovation in Latin America and the Caribbean: Institutional Scenarios and Mechanisms. Inter-American Development Bank (accessed 18.07.15.). <http://www.relaser.org/index.php/noticias/76-agricultural-innovation-in-lac-me>.