

RURAL EXTENSION AS PART OF AN INNOVATION SYSTEM

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Rural extension plays a significant and irreplaceable role in an innovation system that creates, designs, validates, and promotes new ideas, solutions, technologies, and forms of management focused on the resolution of problems and satisfaction of the needs of farmers and rural inhabitants and the organizations that represent them.

In view of the above, this document presents proposals for making rural extension a key part of innovation systems focused on rural territorial development. This is understood as the productive and institutional transformation of a specific space in order to reduce rural poverty. ²

- As a promoter of innovation, extension is an important tool for the resolution of problems associated with rural territories, including the loss of natural and social capital and the lack of diversification of the productive structure. As a result, the institutions that promote it must be effective in their innovation policies and the instruments used to implement them.
- In order to be successful, rural extension must satisfy the demands and interests of those who receive innovation. It is thus important to promote spaces for coordinated and participatory work in rural territories that create innovation and extension agendas that are defined through census among various sectors representing a large number of stakeholders from the system.
- Extension that promotes co-design in innovation, which is understood as a shared and participatory creative processes of stakeholders who benefit from innovation (receivers) and those who can contribute to the solutions (public and private agencies) is a clear road to achieving changes that contribute to the development of rural territories.
- Extension must conceive of innovation as a learning process in which the engraining of new knowledge and existing knowledge plays a vital role. Pre-existing knowledge and its contribution to the generation of innovation must be valorized. Aspects such as multidisciplinary teams and solid training of extensionists in strategies and methodologies that promote innovation are key for this work.

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⁽²⁾ Berdegue, Julio and Alexander Schejtman. 2004. Desarrollo Territorial Rural (Rural Territorial Development- Spanish language document).

Extension and Its Debt as a Promoter of Innovation Processes

Case studies³, were conducted to identify the factors that allowed for extension to become a promoter of innovation by allowing for problems to be solved and addressing the new needs of the inhabitants and rural territories studied. These cases, which are complemented by the review of information on the topic, allowed researchers to identify key factors for successful extension processes as promoters of innovation:

• Prioritizing research and extension systems that promote and focus on the innovation or changes needed by receivers. This is proposed as a way to leave behind models that generate innovation "to be adapted to the farmer's reality," and replace them with spaces that facilitate participation and discussion among those interested in the innovations.



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- Rural inhabitants' ancestral or preexisting knowledge is an important base upon which one can and should work for the development of innovation.
- Rural extension can promote and bring together collective spaces of collaborative creation that require innovation among a diversity of stakeholders linked to the topic who, in addition to producing knowledge and strategies for action, facilitate the creation of networks and coordination of stakeholders.
- There is a need to update and develop new policies and instruments that allow for process of generation and adoption of innovative ideas and the extension systems that support them to be promoted and financed. These policies and instruments should consider the participation and management of farmers, rural inhabitants, and their organizations, addressing the multiple activities that they generate in rural territories. Their funding should be related to the real needs that require innovation for their design and implementation.
- Rural extension that forms part of a system of innovation requires extensionists with the appropriate skills such as the ability to coordinate stakeholders, create networks, and manage relationships with representatives of public and private institutions with research and innovation and agents from the market in which rural products and services are placed. Training of farmers and rural inhabitants and their organizations is also key so that they may be active participants in the innovation process.

⁽³⁾ Three case studies were studied: the Social Brand project implemented by the Coordinator of the Integration of Rural Economic Organizations (Coordinadora de Integración de Organizaciones Económicas Campesinas, CIOEC)-Bolivia, the "Natural Meat" project developed by Empresa Carnes Andes Sur, Parral- Chile, and the company Jambi Kiwa- Ecuador.



Learning from the Experiences

The three case studies allowed us to identify the conditions and actions that made these experiences successful.

A brief description of these experiences follows:

Table 1: Overview of the selected experiences in the context of this study

Country	Experience	Brief Description
Bolivia	The "Social Brand" of Bolivia's Coordinator of the Integration of Rural Economic Organizations (CIOEC)	The social brand is a distinctive marker that looks to restore value to and recover ancestral forms of organization and production. It has been implemented in primary and processed agricultural products, handicrafts, and tourism services based on solidarity. Accreditation addresses four areas: sustainable agriculture, food sovereignty, economic solidarity, and rural self-management. It is granted to rural economic organizations.
Chile	Natural Veal, Enterprise Carnes Andes Sur, Parral	This entity markets a product that is unique in the territory and the country. It is produced using natural methods that favor the well-being of the animal and the production of the most tender meat possible.
Ecuador	Enterprise Jambi Kiwa, (Herbal Medicines), Chimborazo	This association produces and sells medicinal herbs, tea, and related products to national and international markets. Its activities are based on ancestral knowledge of these crops.

The aspects that contribute to the proper performance of extension as a promoter of innovation in these cases are as follows:

1.- Leadership of the organizations in defining the way in which they want to innovate and the course of action. The three cases were developed in farmers' organizations with strong leadership and significant spaces for member participation. With the support of their extension teams, these organizations participated actively in the creation, development, and dissemination of the innovations. They were conceived using a co-design approach through joint and participatory creation with farmers, rural inhabitants (tourism service providers and artisans in this case), advisors of extension teams, the advisors contacted at research and training institutions (universities), and professionals from public institutions related to safety norms, property registration, and other areas. The extension teams played a key role in this process, making contact with experts and institutions as required and promoting the spaces for meeting and work. In addition, the organizations (leaders and members) participated actively in the dissemination and adoption of the innovations. In the case of Empresa Jambi Kiwa, the extension focused on innovation was implemented with the "campesino to campesino" system and recovered and combined ancestral knowledge and new quality requirements and the variety of herbal medicines. In the case of the Bolivian Social Brand, the committee that oversees the granting of this certification is composed of leaders of rural organizations, thus promoting their participation as active participants in innovation. A participatory certification model was developed using a local protocol rather than certifications that use external protocols (private), most of which cost a great deal.

2.- Systemic approach to the process of innovation and extension. In order for rural extension to contribute to and promote innovation, it must be part of a more systemic, less linear social organization and consider

the importance of both technological changes and those that take place in the social, cultural, and political realms. This implies that the focus on extension cannot only be the appropriation of new technologies, but also the cultural and social changes that this implies. The extension in the case studies did not only address technical challenges. It also addressed changes at the organization level, increasing their social capital in all cases. In the experiences analyzed, extensionists and leaders interacted and coordinated with a wide range of stakeholders from public institutions (focused on promotion and financing), research institutes, entities focused on innovation and exportation, and research centers (universities), among others.

3.- Innovation in order to add value to local products. The innovations developed in the three cases are in line with the current tendency to add value, differentiate local products, and "accredit" their origin and form of production. The important thing about the cases



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⁽⁴⁾ Articulating Research and Extension: The Case of the Apiculture Chain in Argentina. Synergies for Innovation and Territorial Development-Spanish language document, Adrian Gargicevich - Enrique Bedascarrasbure, Il Latin American Meeting on Rural Advising Services. Managua, September 2011.

studied is the bridge that they establish between ancestral forms of production and new requirements and attributes requested by the market. Extension plays a key role in this action in terms of making the required "connection." In addition, the spaces in which the accreditations are based bring together the new functions "assigned" to rural territories, as they are now "challenged" to preserve natural resources and cultural heritage in addition to producing food.

Food safety, environmental sustainability, and cultural identity (which are present in all of the products of the cases studied) are increasingly demanded by better informed and aware citizens. As such, consumers can become active promoters of innovation processes, as they are the ones who consume these new products and services.



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Conclusions and Recommendations

The cases studies allowed researchers to explore the conditions that favored innovation processes in which extension played a key role. The analyses presented the need and "opportunity" to promote and strengthen said conditions. It is thus fundamental to "conceive of and develop" rural extension as part of a system of innovation in which coordination and joint work by stakeholders is the basis of success and in which farmers and rural inhabitants and their organizations play a key role. This close, collaborative work increases the likelihood that the innovations will be disseminated (transmitted, passed on), adopted and valued, and constitute a contribution for the development of rural territories and those who live in them.

- Part of the success of rural extension as part of an innovation system involves taking up the demands of those who receive them and utilizing co-design as the basis for creating innovations. It is thus important to promote spaces for collaborative work in rural territories for the construction of extension and innovation agendas that are broadly accepted by consensus by the stakeholders within this system.
- Conceiving of innovation as a fortuitous space of the development of unipersonal ideas does not allow us to consider its true nature. Extension should promote spaces for joint creation, recognize barriers to participating in the innovative process, identify and coordinate key stakeholders, promote interinstitutional cooperation, and engage in multiple forms of management.
- Extension should include the innovation of a learning process in which "engraining" of new and existing knowledge plays a vital role. In this case, the valorization of preexisting knowledge and the contribution that it can make to the generation of innovation is fundamental.



Recommended Reading

- Berdegue, Julio y Alexander Schejtman. 2004. (<u>Rural Territorial Development-Spanish language document.</u>)
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RELASER – Latin American Network for Rural Extension Services, contributes to improving the competitiveness, sustainability, and equity of agricultural and agro-food sectors and the rural territories that surround them through the strengthening of rural extension as a part of an innovation system. Its purpose is to create mechanisms for collaboration and spaces for dialogue and learning that allow for the strengthening of rural extension systems in Latin America through cooperation and the exchange of information and knowledge.

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