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STRATEGIES FOR COLLECTIVE ACTION: PRODUCTION-COOPERATIVE "CONEJOS ANDINOS DE MENDOZA

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ABSTRACT

This work tackles the development of collective actions taken by Mendoza Rabbit Production-Cooperatives, associated to Rural Extension activities implemented between 2002 and 2014 by INTA, the National Institute of Agricultural Technology in Mendoza. Collective action is the theoretical approach used in the project, which, among its various definitions, is considered as the ability of a group to manage common resources. Moreover, collective action is the result of interactions between the interests of the group and the individual strategies of the actors. Two types of collective action are recognized: the structural form, which only considers the existence of organizations, and the functional form, which considers the work of the organizations. The goals of this study are to identify and analyze the factors (internal, as well as external) that promote and deter the development of collective action taken by the members of cooperative associations. The methodology is based on the handling of quantitative and qualitative data. The quantitative data was obtained from secondary sources, while the qualitative data came from semi-structured interviews conducted with several rabbit producers who are active at the local level. Factors that mobilize collective action are associated to the trust ties arising from the economic and socio-cultural homogeneity of the actors, as well as their geographical proximity, the pursuit of technical knowledge and the genetic improvement by staff members, the need for marketing strategies and economic resources, and their interest in participating in governance processes; on the other hand the factors which undermine collective action are connected to pluriactivity, the tensions built in those processes meant to articulate their own interests to the interests of the group as well as the phenomena of disaggregation (conflicts, exclusion) that lead the organization members to act individually. Although historical and contextual factors, prior to





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the formation of the 'Conejos Andinos de Mendoza' Production Cooperative have had a strong impact on the dynamics of the collective action at this stage, the capacity of these actors to organize around some common goals, produced a process of collective learning and development of social capital connected to productive, technological and organizational issues. **Key words**: rabbit production, production cooperative, collective action, rural extension.







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Introduction

The present research work deals with the development of actions taken by the Rabbit Production Cooperatives in Mendoza, linked to the Rural Extension activities implemented between 2002 and 2014 by the National Institute of Agricultural Technology (INTA) in Mendoza, Argentina. The task in progress from the extension area is focused on the 'Cooperativa de Conejos Andinos de Mendoza', which was founded in 2012 by a group of rabbit producers connected to INTA EEA¹ Mendoza, through a Project called PROFAM², which was developed at a time of simultaneously growth and crisis of the rabbit industry in the 2005. This production cooperative is created by rabbit producers from different departments in the province (Figure 1), who own rabbit farms with an average of 60 females in production, under intensive production system, selling their products in the domestic market. Working with production cooperatives is a longstanding type of action carried out by Public Extension; however it constantly faces obstacles linked to social, commercial, political, technical issues, and other obstacles which deter dynamic development of collective action.

In order to describe the historical context of the rabbit industry in Mendoza, at the beginning of the 90's, the implementation of neo-liberal measures resulted in changes in the country's economy which had an influence on rabbit production, particularly because Argentina was able to enter the international rabbit meat market. Thereafter, the industry went from a domestic market production to a more intensive production system. Numerous domestic consumption productions were transformed into commercial farms and new producers emerged from the private sector. The increase in production for export was observed at the beginning of the 90's with the opening of the Argentine economy, with a peak between the years 2002-2005. The growth during that period occurred due to the influence of other external factors, such as the restrictive measures that rabbit-importing European countries imposed on China- which in that period was leading the export market-, as well as internal factors, such as the modification of the exchange rate in Argentina as well as social policies with productive content that were applied as a consequence of

¹ National Institute of Agricultural Technology. Experimental Agricultural Station, Mendoza

² Family Producers Program. It belongs to PROFEDER (Federal Support Program for Sustainable Rural Development, INTA





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the country's crisis in 2001-2002. Both national and international contexts favored a very dynamic growth in the Argentine rabbit production during that time, which was also perceived in Mendoza.

When exports began to decline, most of the new enterprises were gradually closed down because the rabbit meat produced could not be wholly sold within the domestic market. After a few years, producers who remained in the industry regrouped in the aforementioned Cooperative association.



Graph Map 1. Research Area: Northern Mendoza Province.

Collective action is the theoretical approach used in the project, which, among its several definitions, is considered as the ability of a group to manage common resources. On the other hand, collective action is the result of the interactions between the interests of the whole and the





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individual strategies of the actors. Two types of collective action are recognized: the structural form and the functional form. The structural form only considers the existence of organizations; while the functional form, apart from its existence, considers the work of the organizations. Collective actions must consider the relationship between structural organization and individual strategies. In this sense, it is important to consider the tensions between: (i) the adhesion phenomena and processes that motivate individuals to subordinate / articulate their own interests to the interests of the group, (ii) the disaggregation phenomena (conflicts, exclusions) which lead members of the organization to individual practices that weaken collective organization. Organizations are thought and built in a process of negotiation and recognition of different identities and complementary / conflicting interests (Muchnik, 2006).

2- Methodology

The methodology used consists of two complementary parts: first, the analysis of quantitative and qualitative date on the basis of access to secondary sources and primary data of the rabbit industry survey. A review and critical analysis on the existing secondary date were carried out, including historical documents, articles previous work statistical data, etc.. In the second part, semi-structured interviews were conducted with key actors working in areas of social and economic development of municipal governments in the northern part of Mendoza and in the Provincial Directorate of Livestock. Groups of rabbit producers and some local organizations were also interviewed, including fieldtrips and observation at selected projects. Those interviews include managerial, economic-productive, commercial and social aspects in order to identify situations and key points of local activity development.

Finally the participant observation technique was used in workshops where the producers and institutions worked together in order for producers to get organized and towards the formation of the Provincial Rabbit Production Council.





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3. Findings and Debate: Rabbit Production in Mendoza

3.1 Socio-Productive System Organization

During the last decade, rabbit production in generally comprised several and small farms with an average of 50 females by producer. From the productive system perspective, rabbit producers worked in small and medium-sized farms.

A limiting factor to its development was the scarce tradition that had rabbit production in our country and particularly in Mendoza. Most of the producers developed this economic activity as a complement to another major activity. Between the years 2002 – 2005, due to the ease of the incoming money - even with little capital a person was able to begin the production –and with good prospects in terms of profitability, many producers without knowledge or prior experience entered the industry. This marked the necessity of continuous training programs and the search for local professionals and supplies during that stage of production.

Another difficulty for rabbit production development was the lack of business training producers had; however there was an emerging need to differentiate their products through the creation of brands, adoption of quality systems along with other issues. Nevertheless, and despite the difficulties described, the number of producers kept growing, as well as their level of organization. Towards the end of 2004, it is estimated that the number of producers was 300, generally organized for the sale of "live rabbit meat" to export oriented cold storage plants and the purchase of some supplies and balanced feed.

	Rabbit Farms Number	Percentage	Number of Female [*]
Small	240	80%	20 to 60
Medium	30	10%	60 to 100
Large	30	10%	> 100
Total	300	100%	

Chart 1: Farms Number and Size. June 2005 Source: Mendoza Rabbit Production Council. 2005 References: * According to number of female

Between 2002 and 2005, the rabbit industry gradually improved its infrastructure and the achieved higher genetic quality. Although the progress made in genetics was limited compared to





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countries of greater tradition in rabbit production, the cooperative association worked with enhanced lines of greater productivity. In addition, the producers had technological and technical support plus analysis of local updated costs at their dispose, resulting from the training improvement and the inter-institutional coordination achieved in the last years of the stage under analysis.

Despite these progresses and considering that the transfer of feed and animals added costs to the production, in Mendoza, as well as in other provinces in the Western part of the country, the rabbit industry was at a disadvantage in terms of prices related to animal feed and other supplies compared to those provinces which had grains and forage production and export oriented for cold storage plants. It was clear that the production was geographically dispersed; however, until the beginning of 2005, the activity was economically justified due to its high profitability. In 2006, a diagnosis on rabbit producers settled in the North Oasis of Mendoza confirmed that in all departments the production. This report confirmed the need for the producers to gather in associations or cooperatives in order to cope with the market difficulties and achieve lower costs of production. (Chaxel and Quagliariello, 2006).

From the collective action and the producers' organization approach, one of the problems which arose at that time, was the diversity of exploitation forms. From producers who barely exceeded self-consumption, to those who exceeded a business unit (between 100 and 300 females according to the geographical region), there existed numerous intermediate gradients between the two of them. Beyond the difference in investment grade, they also differed in training, experience, technology and labor invested. At that time, important developments relating to farm management and structural collective action were achieved, which should be taken as the creation of cooperative associations; in almost all cases, an important technological component was incorporated thus leveling management, food, facilities and rabbit breeds in many farms. Producers who arrived at the end of this first stage (2002-2009) and kept working, managed to overcome a long period of commercial crisis and remained in the industry. It can be said that these producers, improved their technical and management issues, and that they found





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commercialization alternatives in the domestic market, in general working individually and with some level of informality, which allowed them to continue. However, the mechanisms of collective action were limited to a minimum, due to the business activity abandonment, their discouragement, and the dissolution of cooperative associations which had been created. Until the sudden drop in the industry, which began in 2005, these rabbit producers had reached an interesting degree of Group organization, existing not only in more informal groups, but also in cooperatives. At least five groups were created: the Caye Cooperative Association (from Lavalle Department); another group of rabbit breeders who operated with the above mentioned cooperative from Maipú Department as Caye controlled association; the Sumampa Cooperative and Conecuy Cooperative (both in Guaymallén Department) and finally, another independent group in Maipú Department. At that time collective action in general reflected a fledgling organization and was primarily due to the need to operate in the export market (live rabbit meat). Sales were carried out weekly; in order to transfer the animals, a truck was sent by the cold storage plant or hired by the associated producers and animals were loaded at some encounter point, usually the farm of some producer.

It is important to look into the networks created by various organizations and those governance processes that come into play, since both municipal governments and other institutions participated in the development of rabbit production, with different degrees of commitment. This inter-institutional coordination and the network formation with producers is essential in development programs as the structure of regulation and actor coordination, both in the productive sector and the institutional support system.

In regards to the socio-institutional organization, when the participation of government agencies on rabbit development plans is analyzed, it can be said that, between the years 2002 to 2005, State support was important, achieving a certain impact. There was a significant presence in and promotion spirit of the activity involving various government agencies at the national, provincial and municipal level through a range of actions. Subsequently, between 2005 and 2009, the institutions dissociated from the activity, unable to find valid answers for the sector. The crisis exceeded all foreseeable issues in a process involving the entire country.





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3.2 Overview of the Cooperatives

3.2.1- "Cooperativa "CAYE" de Lavalle" "CAYÉ" Production Cooperative, Lavalle

It was created towards the end of 2002³, by a group of small-scale producers from Lavalle department, who held subsidies from "Plan Manos a la Obra" and the PSA⁴. It was incorporated as "Cooperativa de Cunicultores Lavallinos de Provisión, Transformación y Comercialización", but it became known by its fictitious name, "CAYÉ"⁵.

The social and economic characteristics of this group were different from those of previous undertakings, who were mostly made up of peri-urban producers. Lavalle's rabbit producers were mostly rural farmers of scarce resources. The cooperative was actively promoted and supported by the Municipality, which committed itself to the local development of the rabbit production industry.

"Of course, in 2003 there was money for Lavalle ...the dough for Lavalle came in and the Lavalle cooperative was created, in 2003." (New producers from Maipú department)

Since its creation, this cooperative became a benchmark in the process of developing collective actions, as it attracted a group of producers from the province's Northern area who were not reaching the level of institutionalization required to enter the rabbit export market.

"... we used to go to meetings in Lavalle, and there were always ...(problems), as Lavalle producers would ...buy our rabbits at lower prices and would not act as intermediaries with the cold storage plants ..." (New producers from Maipú department)

 $^{^5\,\}text{CAY}\acute{\text{E}}$ a term taken from the Huarpe language, meaning Big Heart. The Huarpe people are the native inhabitants of the Cuyo region.



³Source: Directorate of Cooperatives and Mutual Societies, Ministry of Human Development, Family and Community, Mendoza Province. Rabbit production database (10 June, 2011).

⁴ "Getting down to Work" Program and the Farming Social Program, respectively.



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"I re-create the Lavalle Cooperative. The Lavalle cooperative is an old cooperative." (Longstanding commercial producer from Guaymallén department)

3.2.2- "Cooperativa de Provisión Agropecuaria CARNES LASHERINAS Limitada" Farming Production Cooperative "CARNES LASHERINAS" Limited

It was created mainly by unemployed urban and peri-urban producers, who received subsidies from the municipal government of Las Heras department. This cooperative, promoted by the municipality, was first incorporated in and then unregistered from the Directorate of Cooperatives. Its emergence was mainly due to the initiative of the local government and it only achieved formal structure as a cooperative, without accomplishing the development of functional collective actions.

"It emerged in 2002; everything was organized by B., with the support of A. (the mayor), so, well, the first thing we had to do was to get some sort of legal entity, in order to bring producers together; so from then on I set to create the famous cooperative (...), which we never managed to set in motion." (Longstanding commercial producer. President of the cooperative)

3.2.3- "Cooperativa de Provisión, Transformación y Comercialización "Agropecuaria SUMAMPA" Limitada Cooperative for Provision, Transformation and Commercialization "Agropecuaria SUMAMPA" Limited

It began its activities in 2004. It was a small cooperative comprised of longstanding commercial farmers from Guaymallén's peri-urban region. It emerged as a result of the conjunction of community, individual and institutional interests. These producers had developed strong horizontal relations among themselves as well as strong ties with the municipal government and the provincial Directorate of Cooperatives.

This strategy allowed them to gain access to important subsidies for projects they had submitted, and hence they were able to purchase machinery for making their own balanced feed. Following the crisis, the cooperative was able to remain functioning due to its activities in the internal market, as its producers had their own customer base.





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This cooperative experienced conflicts with another group from Guaymallén over positions of

power in the department's council.

"...in 2004 we set to create the cooperative with C. and there were us and I can't recall who else, who wanted to establish the federation, we were actually trying to get the two cooperatives to work together but it was a failure, we just couldn't achieve that." (New producers from Maipú department)

"In C.'s cooperative, we were there for a short time, because it ended up being an odd business, something a friend of his had put together...it was a rather bogus cooperative..." (New producers from Maipú department)

"It was good because we did a lot of advocacy; we were at the Industrial Fair. We had a stand there backed by Guaymallén's municipal government...Of course, Sumampa cooperative had lots of contacts." (New producers from Maipú department)

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3.2.4- "Cooperativa Agropecuaria de Provisión, Transformación y Commercialización "CONECUY" Limitada" Farming Cooperative for Provision, Transformation and Commercialization "CONECUY" Limited

Created in 2005 by producers from Guaymallén department, its characteristics were similar to the abovementioned: small in size, comprised by longstanding peri-urban commercial producers. However, unlike the others, which were promoted by local governments, this cooperative was established as an initiative of independent producers with political ties.

A strength that set this cooperative apart is that it worked in an organized manner for some time after the crisis of the external market, selling its products in the domestic market. For this purpose, the slaughter was carried out in a small room with municipal authorization from Maipú department, leased by the cooperative. They managed to sell their products to a supermarket chain through an intermediary who was selling chicken; unfortunately, the profitability was very





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limited and the cooperative was unable to sustain itself; hence, the farmers began to quit

producing. There were heavy conflicts within the cooperative (2006).

"Surely, it was meant for export. But we wanted the domestic market...We did create Conecuy cooperative...we had been weekly slaughtering and delivering seven hundred units in the Greater Mendoza area. We had even reactivated a cold storage plant with the members of the cooperative." (Longstanding commercial producer. President of the cooperative)

"Absolutely not, no subsidies. Not even for commercialization. As for the genetic part, whatever you may have contributed, in your role at INTA." (Longstanding commercial producer. President of the cooperative)

3.2.5- "Cooperativa Agropecuaria de Provisión, Transformación y Commercialización "MENDOCINA DE CUNICULTORES (COMECU)" Limitada" Farming Cooperative for Provision, Transformation and Commercialization "MENDOCINA DE CUNICULTORES (COMECU)" Limited

It emerged in 2005 with an initial core comprised of a fraction of the first rabbit farmers association of the northern region. It had begun producing and selling in the beginnings of the cycle; in 2004, it issued its invoices through Lavalle's cooperative ("Cayé").

"...we weren't sure whether to make it a controlled cooperative of Lavalle's cooperative or to remain independent but working together. We were planning to create a federation ...(...) It remained independent." (New producers from Maipú department)

COMECU became an actual cooperative after the crisis, in mid-2005. It is the only cooperative that tried to develop agro-industrial products using rabbit meat –it sought to produce pickled rabbit and pâté. However, the commercial failure of this endeavor and the difficulties for selling these products in the domestic market led to the withdrawal of the group's leader and the eventual inactivity of the cooperative.

"...a mistake made by the producers was to have...that business only and...having aimed at exports only; because those products...in 2004, 2005 were sold in huge amounts, thus none of us considered the domestic market." (New producers from Maipú department)





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3.2.6- "Cooperativa Agropecuaria"CONEJOS ANDINOS" Limitada" Farming Cooperative "CONEJOS ANDINOS" Limited

It was established in 2012, through the actions of the rural extension program of INTA (National Institute of Agricultural Technology) in Mendoza, bringing together producers from several departments throughout the province, many of whom had been members of the abovementioned cooperatives that were dissolved due to commercial issues. All of its members have their own narrow commercialization circuits; however informal these slaughter and sales circuits were, they have operated as resilience mechanisms for sustaining the activity after the crisis. Collective action is also incipient in this case, even though the members have a longstanding experience in rabbit production. Most of them are multi-active farmers, i.e. they combine more than one productive activity, which sometimes undermines collective action -due to the multiplicity of interests- but other times it turns out beneficial as an income diversification strategy. One of the objectives longed by this cooperative is the development -in collaboration with INTA- of a pelletizer machine that would enable the manufacturing of balanced feed, hence lowering costs, making better use of local agro-industrial by-products, and enhancing feed quality. The factors that mobilize this cooperative's collective action include the trustful ties among producers, resulting from their economic, social and cultural homogeneity; the geographic proximity of most producers -even though some of them are located 200kms away-; the staff's need for technical knowledge and genetic enhancement; the commercialization, selling of rabbit fur and buying of balanced feed and medication; the limitations of economic resources; and the interest in participating in governance processes through meetings with the provincial and national authorities. On the other hand, the factors that restrain collective action processes are related to multi-activity, as previously pointed; to the tensions emerging in the process of making individual interests compatible with group interests, as well as the disaggregation phenomena (conflicts, exclusions) that lead members to individualized practices; to the age group involved, as these producers are mostly 55 years and older; and to the lack of family continuity as new generations do not take part in the activity.





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4- Conclusions

In the first stage of the analysis, there was a favorable context of demand of rabbits in the international market and competitive prices resulting from the currency reform, which motivated public actors to launch projects, based on the allocation of subsidies for the rural and peri-urban low-resource population, and led private actors to enter this activity. As a response to the social and economic crisis that the country experienced at the time (2001-2002), producers became dynamic and achieved a high level of participation and, hence, significant results in both structural and functional collective action (2002 - 2004).

Rabbit Production Development Programs require thorough planning as well as continuous evaluation encompassing issues of production, industrialization, commercialization, training, technical assistance, organization and provision of critical supplies. Taking these factors into account would yield adequate answers to the needs of the sector, helping it achieve sustainable production systems and social equity.

The weakness of collective actions aimed at the institutionalization of the local rabbit industry promoted by government organisms (represented by the Rabbit Industry Provincial Advisory Board and the Provincial Rabbit Industry Law) shows that they were mostly driven by the juncture rather than by a historical process of rabbit production consolidation in Mendoza. The convergence of different technological models for rabbit production –one tied to traditional methods and the other one based on intensive methods, promoted by public organisms, private companies and investors- gave rise to conflicts and tensions that undermined collective action in its first stage. This was due to the perceived competition of these two models: one of them based on small-scale production using simple low-cost technology, with personalized management, associated to domestic consumption and/or informal trade in narrow circuits, oriented to the local market; and the other, based on larger-scale, intensive production, highly productive, with a more impersonal management of animals, embedded in the agro-exporting chain and driven by an entrepreneurial logic. As time went by and export prices dropped, the traditional model proved more sustainable in the long term.





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With regard to the development of collective actions in the 2002-2004 period, they were prompted by the rapid growth of production and by the concepts of participatory governability and public policy governance, especially encouraging the formation of cooperatives. Most of these were founded with the aim of responding to the demand of high volumes of live rabbit meat by export-oriented cold storage companies. The fast move from collective activities to structural collective actions was also a response to a need of the market (having legal entity to issue invoices) and a way to take advantage of public subsidies (creating groups that could benefit from social policies that promoted the formation of associations).

There is a general informality regarding slaughtering and a difficulty to generate collective action to tackle this problem. The various stages of industrialization of small-scale production reflect the lack of regulation of manufacturing processes. Regulations should be adapted to each phase of industrialization -most importantly to slaughtering, packaging of whole and chunked rabbit, and manufacturing of by-products such as pickled rabbit, pâté, and so on- for medium-scale production processes.

Another aspect related to the implementation of development programs is that they should incorporate, as a key objective, the creation of solid institutional networks comprising public and private organizations, with a structure that allows for the handling of critical moments with integrity and backing producers in the search for the most adequate solutions. The history of local rabbit production tells us that there has been insufficient support from state organizations and structures during periods of crisis. There was an evident lack of planning in the evaluation and follow-up stages of existing programs. This problem was intensified by producers' limited capacity to integrate, organize and manage their common interests, particularly when commercialization conflicts emerged.

Generating collective action processes implies overcoming the structural weakness of producers' organizations and bestowing them with the capacity to interact on equal terms with the state and with other actors; for this to be accomplished, state support is essential. That is how the growth and consolidation of their entities and associations in the various production chains may be achieved, including cooperatives, peasant organizations, associations, consortiums, etc.





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The consolidation of local rabbit production and the construction of an incipient knowledge system, as well as the production, commercialization and distribution of this kind of meat, and the new market niches, allow us to claim that we are entering a new stage of local development of the rabbit industry.

It is also necessary to make a final remark on the need for a strategic shift aimed at increasing the participation of public research and development (R+D) entities in the local dynamics of technological change. The production of scientific and technological knowledge should be aligned with local social needs and know-hows, understanding social inclusion as a scientific-technical challenge, i.e. striving to find the social application of the scientific and technological knowledge generated locally, particularly in the field of family-based agriculture.

5- Bibliography

Barros Biscari, R. 2010. "Los saberes colectivos locales como factores del anclaje territorial. El SIAL de la rosa mosqueta rubiginosa de la patagonia argentina". [*Collective knowledges as factors of territorial anchorage. The SIAL of rubiginosa rosehip from Argentina's Patagonia*]. Universidad Autónoma del Estado de México (UAEM) EAAE-SYAL International Seminar on Spatial dynamics of the food and agricultura systems: implications for sustainability and consumers' wellbeing. Italy, Parma. (Avalaible in CD)

Bocco, A. 2005. "Análisis participativo del proceso de transformación productiva e institucional en el departamento de LAVALLE, provincia de Mendoza" [Participatory analysis of the productive and institutional transformation process in Lavalle department, Mendoza province]. Rimsip – Latin American Center for Rural Development. 145p.

Boucher, F; Muchnik, J.; Requier Desjardins, D. 2004. Sistemas Agroalimentarios Localizados: agroindustria rural, valorización de recursos locales y dinámicas territoriales. Los desafíos de los Sistemas Agroalimentarios Localizados [Localized Agricultural and Food Systems: rural agroindustry, appreciation of local resources and territorial dynamics. The challenges of Localized Agricultural and Food Systems]. SIAL Network's International Congress. Rural Agro-industry and Territory. ARTE. Toluca, Mexico, December 2004. (Avalaible in CD).

Chaxel, S; Quagliariello, G. 2006: "Diagnóstico de la producción de carne de conejo zona norte de la provincia de Mendoza" [Diagnosis of rabbit meat production in Mendoza's Northern region] INTA EEA Mendoza. Rural Outreach Agency of Rural Luján de Cuyo deparment. Rabbit production Project Report.

National Forum of Family-based Agriculture. 2006. "Lineamientos generales de políticas públicas orientadas a la elaboración de un plan estratégico para la agricultura familiar" Fortalecimiento de





Facultad de Medicina Veterinaria y Zootecnia, Asociación Científica Mundial de Cunicultura – Rama Americana Secretaría de Desarrollo Agropecuario del Gobierno del Estado de México, Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación, Consejo Mexiquense de Ciencia y Tecnología

las organizaciones [General Guidelines for public policies aimed at the formulation of strategic plans for family-based agricultura. Strengthening organizations].

González,D.; González,D.J.; García V.; Ramírez, H. 2010. Productores de flor de corte de la comunidad de Francisco Zarco, en el municipio de Tenancingo, Estado de México: ¿Un caso exitoso de acción colectiva? [Flower producers at Francisco Zarco community, Tenacingo municipality, Mexico State: a successful case of collective action?] International Seminar on Spatial dynamics of the food and agricultural systems: implications for sustainability and consumers' wellbeing. Italy, Parma. (Avalaible in CD)

Muchnik, J. 2006. Sistemas agroalimentarios localizados: evolución del concepto y diversidad de situaciones [Localized Agricultural and Food Systems: evolution of the concept and diversity of situations]. SIAL Network's 3rd International Congress "Local Agricultural and Food Systems" Food and Territories "ALTER 2006". Spain

Local Development and Social Economy Program. "Getting down to Work". Ministry of Social Development. http://www.desarrollosocial.gov.ar/Planes/DLES/info_gral.asp (accessed on May 27, 2009)

PSA- Farming Social Program: "10 años de Política Social con Pequeños Productores Minifundistas" [10 years of Social Policy with Small-scale Producers], document by SAGPyA, PROINDER-BIRF and PSA, Buenos Aires, 2003.

Schejtman, A.; Berdegué, J. 2004. Desarrollo Territorial Rural [Rural Territorial Development]. RIMISP. Latin American Center for Rural Development. Ediciones Rimisp March 2004. 53p. Thomas, H. 2008. De las tecnologías apropiadas a las tecnologías sociales. Conceptos /

estrategias / diseños / acciones [From appropriate technologies to social technologies. Concepts / Strategies / Designs / Actions]. Group for the Social Study of Technology and Innovation. IEC/UNQ. CONICET. [online].

Vargas, M. 2007. "Analisis de rentabilidad de un pequeño productor de conejos" [Profitability analysis of a small-scale rabbit producer]. Luján de Cuyo Municipality, Sub-directorate of Socio-productive Development. Directorate of Family and Social Development.

