

# IMPORTANCE OF LEADERSHIP AND ENTREPRENEURSHIP FOR THE PERFORMANCE OF THE POULTRY SECDTOR IN ARGENTINA

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APRESENTAÇÃO ORAL

Economia e Gestão do Agronegócio

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Key words: Coordination, Innovations, Social Capital

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### 1. Introduction

Since the beginning of the process known as "industrial aviculture" (1960), Argentina has registered sustained growth in production, consumption and exports of avian flesh (see Annex). This growth was important during the 1990s as a consequence of the direct price transfer due to technological and organizational improvements achieved in the sector. In addition, Argentina has a status of Country Free of Avian Flu and Newcastle.

These improvements were due not only to investments in state-of-the-art technology, genetic improvement and the use of better raw materials and organizational innovations, but also to great collective actions between different vertically and horizontally coordinated companies. Companies increased their capacities, innovated in products and processes, developed different organizational schemes (governance structures) and reached new markets and consumers.

Vertically, most of the companies have different levels of integration or coordination by more or less formal contracts. Companies generally have vertical integration in R&D and slaughtering, and outsource the fattening process, acting as coordinators and leaders of the value chain. The product (baby chicken) never leaves the property: Fatteners are performing a service for the leading company. Horizontally, most of the coordinating companies form part of CEPA (Cámara de Empresas Procesadoras Avícolas-Chamber of Avian Processing Companies) that works on medium and long term strategic aspects for the entire sector. The most important are: a) the export of fresh chicken and chicken pieces, b) the defense of the Argentine industry against dumping actions by the Brazilian poultry industry, and c) the health condition of the Argentine poultry industry.

This vertical and horizontal coordination implied a great level of leadership and entrepreneurship of the companies involved in the whole business.

The objective of this paper is to identify how leadership and entrepreneurship have been important elements in the development of the Argentine poultry sector. The secondary objectives are: a) identifying the patterns of companies in the sector, b) describing the Argentine poultry agribusiness and its participation in world commerce, and c) identifying how this sector is working for the new scenarios.

### 2. Methodology

The research will be applied and descriptive (GIL, 1994), once it will detail the determinants of leadership and entrepreneurship in the development of poultry sector in Argentina. Methodologically, this paper has a macro-level and micro-level approach. The study of the sector (macro-level approach) is based on primary and secondary information sources: Interviews with experts in the sector (producers, industrialists, chamber representatives, etc.) and bibliographical search.

Primary information is based on face-to-face questionnaires that encompassed topics related to leadership and entrepreneurship in poultry sector. Questionnaires were done to experts, CEO's and the president of the Argentine Poultry Chamber (CEPA). Subsequent phone calls were made to clear doubts and obtain additional information to contextualize the answers. Each questionnaire comprised objective questions aimed at understanding the behavior of raisers and abattoir in the development of the sector, especially regarding how this sector was organized by leadership of those that coordinate the chain. A total of six people answered the questionnaires and the data were treated statistically.

Micro-level approach has been performed contacting CEO's of three companies of the sector. The companies studied represent 50% of total poultry sector in Argentina. Understanding how the three companies developed their business was important to state leadership and entrepreneurial aspects at micro-level. The necessary information was obtained in interviews for all three companies.

Applied research is carried out, since it depends on knowledge developed by pure research, but whose interest is knowledge application and practical consequences. The research has an explanatory level, taking into account that it seeks to develop, clarify and modify concepts and ideas, with a view to formulating more precise problems or hypotheses that can be researched in further studies, besides having a less rigid planning, not applying quantitative techniques and being carried out with more practical concerns (GIL, 1994).

Also, the observer participator method in agro-industrial chains in the last six years is used through research reports and case studies in research groups (Food and Agribusiness Program-PAA-School of Agronomy-UBA, PROSAP, PENSA, Global



Food Network), aimed at characterizing the key entrepreneurial elements and advance the understanding of the development of the sector, following the new institutional economics theory.

# 3. Literature review: New institutional economics, entrepreneurship and leadership

In the analysis of an economic system, the institutional environment and its enforcement are as important as the way in which organizations develop in that environment (Palau & Jatib, 2003). Besides, firms that have the function of producing –neo-classical theory– and transacting –neo-institutional theory– require a certain degree of technology and organizational ties to carry out their activities. Organizations buy or produce the goods they need to produce their own goods or services, considering transaction costs (at least for the TCE Theory). Organizations thus appear as organizational structures rather than technological functions. The cost of the price mechanism, the cost of the market –the transaction cost– is what leads to the way of governing the transaction.

The use of "more unusual" forms of governance (Ménard, 1996) is rapidly increasing in the agroindustry. The higher the global consumers' quality demands and the need of the industry to offer its products JIT (Just in Time), the greater the asset specificity, needing better forms of organization and control. As a result, hybrid forms become important governance structures to coordinate the new level of asset specificity. Hence, the actual agribusiness is more contractual than price driven. Contracts represent not only secure price, but also the possibility of belonging to a network of top-level organizations. Menard (1996) states that up to now, the literature on hybrid forms has made emphasis on contracts characteristics —arbitration clauses, acquisition, taking or paying, and measures to create "hostage" positions. But other characteristics are involved too, that can be seen when we look at the incentives and inter-company control agreements.

Schruijer & Vansina (2004) explore the contracts and develop the concept of "multiorganizational relationships" (MORs). This organizational form establishes that there
exists between the parties a high frequency of transaction, as Williamson specifies, but
there are in turn relationships of trust, a win-win attitude and common goals. The
authors define MORs as "the emerging work system between two or more
interdependent parties that is formed to address a concern, problem or opportunity".
As in this type of structure there are people involved, it is important to consider how to
manage and promote the MORs to develop win-win activities and common goals. In
this context, leadership and entrepreneurship are success critical factors of the
relationship.

The development of entrepreneurship research within economics differs somewhat from that of other social sciences. Entrepreneurship is studied in virtually all disciplines, ranging from social anthropology to organizational theory to mathematical economics (Henrekson, 2007). However, what is entrepreneurship? First, it deals with individuals and organizations that actively contribute to renewal and change in the economy. It does



not really matter whether the entrepreneur is the person who provokes change or merely adjusts to it. Entrepreneurial action can mean both creation of opportunity and response to existing circumstances, in the presence of which entrepreneurs have the daring to embrace risks in the face of uncertainty. Second, entrepreneurship is a function, one that is carried out by specific individuals. Given that they choose to do so, the activities may be productive, unproductive, or even destructive from a societal perspective (Baumol, 1990).

Baumol pioneered the role of institutions for entrepreneurial behavior; how "the [social] structure of payoffs" channeled entrepreneurship to different activities. If institutions are such that it is beneficial for the individual to spend entrepreneurial effort on circumventing them, the individual will do so rather than benefiting from given institutions to reduce uncertainty and enhance contract and product quality. The outcome in this case is expected to be one where corruption and predatory activities prevail over socially productive entrepreneurship. The supply of entrepreneurial effort is also likely to be influenced by the institutional setup. The wealthy world does a good job of directing entrepreneurship toward inherently productive purposes (a large part of the explanation for wealth).

Based on broad historical studies (Rosenberg & Birdzell, North) it is now widely recognized that protection of private property rights is of fundamental importance for economic growth. With secure exclusive private property rights, productive entrepreneurship is likely to thrive. This follows because successful entrepreneurs know that they will retain the entrepreneurial rents they earn and because specialization and the division of labor are greatly facilitated, which broadens the range of potential entrepreneurial discoveries.

However, how could entrepreneurial attitudes be explained in emerging countries, with high uncertainty –mainly institutional– and low respect of property rights? What elements do people and companies have for entrepreneurship? In this case, with weak institutions, entrepreneurship could be achieved developing collective actions, with strong influence of leaders and collaborative leadership.

Literature on leadership deals with the issue of how to achieve collaboration and unity between groups. A collaborative leadership role is process oriented. A collaborative leader identifies relevant stakeholders and brings them to the table –as inclusively as possible–, keeps them at the table and helps them to deal with one another constructively. Huxham and Vangen (2000) define leadership in multiparty situations as "mechanisms that are central to shaping and implementing collaborative agendas" (p.1171). As a result, entrepreneurial attitudes in a "MOR" respond to coordination and development of networks due to uncertainty and weak institutions –unity creates strength.

## 4. The Argentine poultry industry.

Poultry production in Argentina goes back to 1857. By 1945 there was already an important poultry population, with a semi-industrial exploitation concept and low specificity levels, with pedigreed mother lines and some double-purpose cross breeding: hens for egg production and chickens for consumption. Commercialization was organized through storage facilities and consignments represented by individuals or organized in cooperatives. Most of the stored goods ended up at the "Mercado Concentrador de Aves y Huevos de la Capital Federal" (Buenos Aires Consolidating Market for Birds and Eggs), where the most important wholesalers operated. Here most of the products were prepared, eggs were selected and classified for consumption, and live five-month-old chickens were sold at a weight of five pounds; so were other kinds of birds. Upon request, chickens were slaughtered and plucked; no evisceration took place.

This structure continued into the early 1960s, with slight growth and progressive organization of the production. Chicken fatteners had invested in sheds, mostly in the Argentine agricultural production area (mainly provinces of Entre Ríos and Buenos Aires) in order to gain easy access to the feed necessary for chicken production. In Figure 1 we can see the organizational structure of aviculture in the 1960s. By then there were already incubator businesses that supplied baby chicks (hybrid chickens). These were bought (t2) by the fatteners, who fattened them by purchasing balanced feed and contracting veterinary services (health). Once fattened, the chickens were sold to middlemen or cooperatives (t3), or to brokers who visited the areas of production or were located near the large consumption centers.

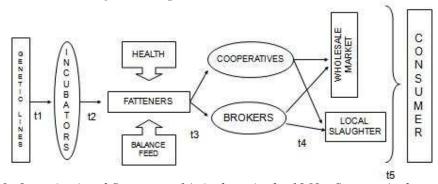


Figure 1. Organizational Structure of Aviculture in the 1960s. Source: Authors.

Within this organizational structure there existed great organizational uncertainties, mainly due to risks inherent to production/fattening, risks related to acquiring or selling products –buy-sell uncertainty and price fluctuations–, risks related to opportunistic actions, and financial risks. The assets involved did not have high specificity: Specificity was mainly given by the baby chick (physical asset specificity), the fattening know-how (human asset specificity) and the area of production (site specificity).



The common governance structure was the market that generated very high level of "transaction costs" (at organizational level). Normally the chicken fattener had the least amount of information in the poultry chain and suffered these transaction costs most. In addition, at technological level, fixed and variable costs were also high, since production efficiency was low (approximately 5 Kg. of feed-1 Kg. of chicken) and there were high health risks (mortality) and low scale. Summarizing, this organizational design generated high costs and diseconomies and, although efficiency was greater than that in the 1940s/1950s, total production costs were still high and generated a high price for the local consumer and a loss of competitiveness globally.

As designed until then, the business was not competitive. The sector was not going to grow, and the market was going to remain small, showing low scale and efficiency. Starting in the 1970s, the sector began a process of organizational and technological modernization, showing a strong collective development (multi-organizational relationships, MOR's) and collaborative leadership. The process of vertical integration and vertical coordination with the chicken fatteners started in 1976. Whoever wanted to be competitive had to seize the stages of the productive chains and sell a finished, eviscerated chicken. The fatteners had the production know-how and the infrastructure (the sheds), but they could not afford new breeding of chicks due to economic or financial incapacity. In addition, the commercial system based on "storage-Consolidating Market-open air slaughter" could not withstand the larger volume, in quality and quantity; however, neither could the industry withstand this level of costs if it were looking for more competitiveness.

Thus, between 1976 and 1983 the sector was partly vertically integrated, with some businesses producing the fertile eggs, the baby chicks, the feed, the slaughter and the distribution, while others opted for coordination, signing contracts with the fatteners to later slaughter and commercialize the chickens. Moreover, the sector started to incorporate greater amounts of technology into the processes (reproduction, incubation and fattening) and into the products (slaughter and finishing of the chicken). In addition, the slaughtering capacity of the meat processing plants was increased.

What constituted a "better" governance structure for each business (vertical integration or coordination) depended basically on that firm's culture (e.g., businesses that were originally fatteners chose to integrate vertically rather than coordinate). The first case appeared when the agents internalized more than one stage of the chain. For instance, fatteners who had fattening sheds later acquired incubating plants and then built meat processing plants. This is the case of Cresta Roja who was "forced" to choose this system due to the low number of fatteners in its production area. Vertical coordination, on the other hand, appeared in the case of chicken fatteners with low financial and managing capacity for integration and who wanted to continue in this activity. Thus, they tried to sign agreements or contracts with agents above and below the chain (slaughterers and suppliers of baby chicks). In this case, the chicken fattener signs a contract with the "coordinator", by which the former has the obligation to provide sheds, handling and energy (electricity and gas), and the latter must provide the baby

chicks, the feed and the health care. At the end of the fattening process, the fattener receives a price per fattened chicken, adding bonuses or penalties depending on the efficiency of feed conversion, the use of energy or the mortality percentage. This makes it possible for the fattener to have a greater incentive to produce efficiently and therefore have larger returns. At the same time, the coordinator lowers its production control costs and insures a greater number of birds to slaughter. This is the case of Las Camelias or Tres Arroyos.

This modernization of the organizational and technological structure of the chain started in the mid-1970s and became consolidated in the 1990s. In the mid-1990s there were innovations, mainly at institutional level, which impacted on the Argentine poultry industry: Convertibility, State deregulation, privatizations and the free market (lower import and export taxes) generated a greater institutional stability and the possibility for the industry to introduce modern technology and improve the organizational model. Vertical integration or vertical coordination (contracts) served to safeguard the specific assets involved (genetic development or breeding, fattening, slaughter and distribution) and the total costs (transaction and transformation costs) decreased, while consumption went from 10 Kg. in 1970 to almost 18 Kg. per inhabitant per year at the beginning of the 1990s, a product of the lower prices of chicken at the supermarket.

Vertical coordination (contracts) was the most popular governance structure in the poultry industry. However, it has undergone an evolution during the last 30 years. The first contracts were very informal and left a potential for opportunistic actions, increasing the organizational uncertainty. The evolution of this type of contracts is dealt with in the Annex; it can be seen that the sector started to generate a kind of "multi-organizational relationships" with common goals (higher profits and strong competition with other meats). The leader of each sub-system was the "coordinator", mostly the industrialist or the breeder who then built a slaughtering and processing plant.

Technologically, the leading companies that had more than one activity in the chain gave priority to investment in specific assets: The construction of processing plants following international quality standards and the purchase of reproductive grandparents in order to generate a greater fattening efficiency by means of genetic improvements (conversion rate). At the same time, they developed contract models with the chicken fatteners, gaining greater legal certainty regarding the property of the baby chick (by avoiding possible opportunistic sales of the asset to other competitors), generating a larger production scale with lower investment at the fattening stage, and allowing the chicken fattener to produce without buying baby chicks or supplies (feed and health services), while at the same time guaranteeing the sale of the fattened chicken (see annex).

In conclusion, changes may be summarized as follows: a) an organizational redesign (lowering transaction costs, second order economy) and b) technological innovations (genetic, process, feeding, etc., lowering industrialization costs, third order economy). Therefore, the industry shifted from an organizational design with high transaction and

production costs in the 1960s to a new world class business design (price and quality). Thus the habit of chicken consumption was consolidated, increasing consumption in the domestic market to over 25 Kg./inhab./year and the incipient export of chicken parts, mainly chicken claws and giblets, which allowed it to come in contact with the markets.

### 5. Leadership and entrepreneurship in the poultry industry.

Coordination in agribusiness arises as the result of applying different mechanisms that provide the base to satisfy the consumer's demand, bearing in mind the incentives to obtain the expected results and the controls of the agents who perform the task. Therefore, in situations of high perturbation-adaptation, hybrid governance and vertically integrated structures are chosen as the best options.

The new organizational environment in the poultry industry in Argentina is based on "multi-organizational relationships" (MOR) as was explained in the previous chapter. Great entrepreneurship can be observed in all the chain, focused on the final consumer. Due to the interviews done with experts, it can be said that leadership has had an important role in the construction of this new paradigm. But, due to the great associative capacity of the poultry players and vertical coordination, the MOR's have extended beyond the micro-organizational activities (within agents in the same subsystem) and the sector has created strong ties between all players, founding CEPA (Process Companies Chamber) and CAPIA (Fatteners Companies Chamber).

These two chambers represent and lead the whole poultry sector, negotiating with the Government (e.g. taxes, compensations, subsidies). Moreover, with the object of supplying a very competitive external market, national poultry businesses –based on CEPA and CAPIA– have faced the need to develop certain strategies:

- Guaranteeing the best health standards by isolating breeding and fattening.
- Insuring high quality raw materials for the manufacture of balanced feeds by means of systematic checks.
- Implementing BPM -HACCP- BPA Standards and traceability.
- Implementing ISO 9000-ISO 22000 Certification.
- Investing in state-of-the-art technology by means of:
  - 1. Importing grandparent genetic lines.
  - 2. Modern vaccination and birthing machines.
  - 3. Research on avian nutritional needs in order to manufacture the best balanced feed for each stage of development.
  - 4. Logistics of supply and distribution of these balanced feeds.
  - 5. Modernization of the breeding barns and slaughterhouses.
  - 6. Logistics through a network of operators who supervise the management of the cold chain for the products.
  - 7. Telemarketing and Call Center Services for the internal market, through which orders and customer complaints can be respectively channeled.



This entrepreneurial attitude has been possible only because there is great integration and coordination among the different actors of the chain. The governance structures "vertical integration" and "vertical coordination" were the base of leadership. Leadership is not only important inside each company (and its network of suppliers, fatteners, etc.) but also between the different participants of the sector. The result is of the process is greater production, productivity and competitiveness both in domestic and international markets (see Annex).

### 6. Conclusions and (management) implications.

Understanding the leadership and entrepreneurship of a sector helps to identify why some sectors have a different evolution and competitiveness level. The poultry sector is one of the faster development in Argentina and one that offers higher quality. This was achieved only because of great coordination not only on a micro level (companies) but also on a macro level, through lobby organizations (e.g. CEPA), that is, by means of a great level of social capital.

Poultry production and industrialization goes back to 1857. From its inception and until 1970, this sector was extremely informal and showed a low level of competitiveness. Since the 1970s, and mainly since the 1990s, the Argentine poultry industry has been increasing in competitiveness due to institutional, organizational and technological innovations (see Annex). The reasons for these innovations have been a more suitable institutional environment and the capacity of the whole sector to work together, in collective actions, due to great levels of leadership. The production, exports and efficiency have increased abruptly and new markets have been achieved (see Annex).

The current challenge is how to grow further. The demand for avian meat is increasing worldwide, especially from those countries free of Newcastle and avian influenza. The local industry is working at full capacity. Supplying an increasingly demanding external market without neglecting the domestic market implies increasing the number of baby chicks, the fattening farms and the processing plants. This involves two fundamental aspects: a) investments in technology, b) a greater number of chicken fatteners.

If the coordinating industry (the actual leaders of the sector) has to make the necessary investments to increase production –fattening farms– in a country with low access to credit as Argentina, no investments will be possible in slaughter and processing plants. Therefore, raising the number of chicken fatteners constitutes the greatest concern of many businesses in this sector.

It is to be expected that the leadership of the sector will be the key factor in the new Argentine scenario and an important element for new entrepreneurial institutional, organizational and technological structures.

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## 8. Annex.

8.1. Types of contracts in the poultry industry.

**OPEN ACCOUNT**: This was the first type of contract developed by the different participants. The farmers (chicken fatteners) were simply given a loan to acquire consumables, especially balanced feed, baby chicks, vaccines and other medicines; this alleviated their need for capital. Thus, the farmer contributed the capital for land and improvements, fixed working capital, labor, fuel and other consumables. As the farmer sold the fattened chickens, he paid the debt contracted with the business and an overprice for the financing of the purchase of consumables. Under this type of contract,

the balanced feed companies did not participate in the commercialization of the product. At the producers' level, the price of chicken meat was determined by the free play of supply and demand: The producer took the product to market and sold it to the highest bidder. Of course, the transaction costs associated with this type of price formation through the market were high.

GUARANTEED PRICE CONTRACTS: The leading company promised to buy the entire production of chickens, guaranteeing at the same time a price per unit. Thus, the risks associated with prices and placement of the product in the market shifted from the farmer to the coordinating company. Under these contracts, when the guaranteed price did not cover the cost of consumables, the farmer received a difference. However, the farmers were still susceptible to the risks constituted by the prices of consumables and the high requirements of capital to pay the coordinating company in case of loss. In addition, guaranteed prices fostered opportunism on the part of the farmers, who produced low quality chickens while the price was maintained independently. The advantages for the farmer consisted in a decrease of the transaction costs related to the process of price formation; a disadvantage for the leading company lay in the rise of transaction costs due to the farmer's opportunistic behavior.

**FEE PAYMENT CONTRACTS:** As in the contracts mentioned before, the integrating companies provided all consumables and technical assistance for the fattening of the chickens; the difference lay in that the integrating companies retained the property of the chickens and the farmers were only in charge of the fattening. This new concept in contracts reduced the risks run by the producers, who no longer became indebted to the integrator for the consumables: once the chickens were sold, the farmer received a fee for each chicken. For the integrator, the disadvantage was that he faced the risks of commercialization, price fluctuations, etc. For the farmer, the disadvantage was that payments were not based on his efficiency and his efforts were not supervised. These contracts stimulated opportunism, since fee payments were made regardless of the farmer's performance. The process of forming the price of chicken meat at the producers' level consisted in paying for the service rendered in the form of fees, payment for the service of breeding; that is, what was negotiated in the transactions was the service rendered by the farmer.

**SHARED REVENUES**: In this type of contract both parties figured as partners for the benefits, although the revenues were shared unevenly. The revenues obtained by the sale of the birds were shared by both parties after the integrating company had deducted its costs. When there were losses, the integrators absorbed them but raised the prices of consumables unfairly, lowering the amount of revenues to be shared. Another disadvantage for the farmer was that he was subject to price risks and to the risks of the integrator's placing the products in the market.

**FEED CONVERSION CONTRACTS:** offered an incentive to improve production practices. In addition to performance fees, the farmer received an extraordinary payment (or bonus) based on feed conversion, the pounds of feed consumed per pound of chicken produced. In other words, the farmer received a fee plus a performance bonus; this arrangement precluded opportunistic behavior, since the revenues were directly tied to the farmer's performance. In spite of the performance bonus, the farmer still faced the risks of climatic conditions. The process of price formation in this type of contracts

includes a new element: **a mechanism that applies a price formula.** Therefore, there is no longer a uniform price, since this will vary from one producer to another according to the performance of each.

**COMBINED CONTRACTS:** these included fee payments to the farmer, which were adjusted through a performance bonus in order to discourage opportunistic behavior. In this type of contract the objective is to reward the more efficient farmer by means of bonuses and make deductions from the paycheck of the less efficient farmer.

COMBINATION OF THE SHARED REVENUES CONTRACT AND THE **COMBINED CONTRACT:** the coordinating company supplies the balanced feed, the baby chicks, medicines, technical assistance and transportation, and the farmer contributes the farm, the equipment, the labor and other consumables. The chickens belong to the coordinating company. The value of the production is calculated by multiplying the number of kilos of chicken delivered to the processing plants by the unit price; the latter is adjusted by means of a bonus that depends on the relative performance of the producer as compared to that of other farmers. The cost of the consumables provided by the company is deducted from the value of the production and the difference to the producer is calculated. This way, the opportunistic behavior of the farmer is reduced, as the price of chicken meat is formed based on his performance. In addition, the risk of production is decreased as the farmer's performance is compared to the average performance of the other producers. The formation of the price of chicken meat at the producers' level is established by means of a price formula mechanism. Below is a list of the most common contractual obligations of both parties, which will influence the formation of prices and costs of chicken meat for fattening.

### 8.2. Production and trade in Argentine avian industry.

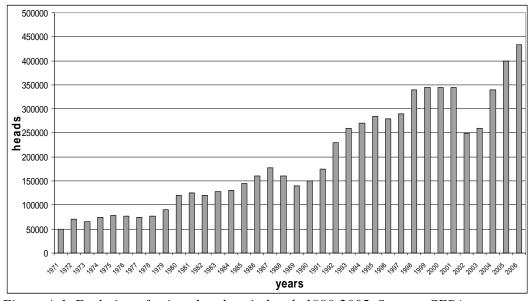


Figure A.1. Evolution of avian slaughter in heads 1980-2005. Source: CEPA

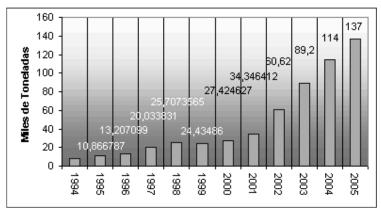


Figure A.2. Evolution of avian exports (in Tons) 1994-2005. Source: SAGPyA

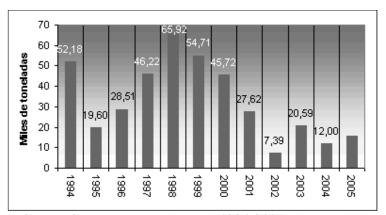


Figure A.3. Evolution of avian imports (in tons) 1994-2005. Source: SAGPyA.