



American Branch
World Rabbit Science Association

STRENGTHS, PROBLEMS AND SOLUTIONS FOR THE CUNICULTURE OF DEVELOPING AMERICAN COUNTRIES

Document prepared during the VI American Rabbit Congress, held in the city of Goiânia, Brazil, on 08/28/2018.

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Introduction

The main objective of this round table was to provide a technical and scientific discussion about the current situation of rabbit breeding, in Brazil and other South American developing countries. As a methodology, it had four rounds, as described below:

- 1 - Strengths of developing countries for the evolution of rabbit breeding.
- 2 - Difficulties of developing countries for the growth of rabbit breeding.
- 3 - Solutions for rabbit breeding in developing countries.
- 4 - Questions and suggestions made by the present audience during the developing of the round table.

From the discussion, it was possible to elaborate this document that will be divided into each of the sections mentioned above. Considering that the two main lines of rabbit breeding have different purposes (pet rabbits or human feeding), the results are be presented separately within each line.



1) DEVELOPING COUNTRIES' STRENGTHS FOR THE EVOLUTION OF CUNICULTURE

General rabbit breeding and human feeding

In countries such as Mexico, rabbits have been a good alternative to fight poverty in disadvantaged places through the creation of government programs to spread rabbit breeding around the country. Countries such as Argentina, Mexico and Brazil have diverse resources for the development of rabbit breeding, mainly related to scientific and technical knowledge and to the production and distribution of supplies. These countries have a certain facility for the production of grains and forages, developed knowledge about manufacturing of good quality food, offer of quality technical services as well as considerable infrastructure for the export of rabbit meat. Another very important strength is that the rabbit breeding provides possibilities for human development, being a gateway to enhance the growing of this activity.

Emphasis is placed, on the fact that developing American countries have less rigorous environmental and animal welfare legislation, compared to European countries, and there is a large number of people interested in investing and starting in the rabbit industry. Although they are a few and of extreme importance, there are associations willing to help, standing out the Brazilian association, as well as the American association. Another outstanding point, is the fact that in the World Rabbit Science Association (WRSA), there is a secretariat focused on establishing projects in developing countries, which can greatly contribute to the promotion of the rabbit breeding activity in these countries. Although there are a few, there is improved genetic material and as an example we cite the Brazilian Botucatu rabbit, which is better adapted to local conditions compared to European rabbits.



Even more important, is to point out that, rabbit meat possesses unique characteristics, associated with a healthy lifestyle, such as: low cholesterol, low fat, high protein content of high digestibility, good ratio of omega 3 and 6 fatty acids and low sodium content. This meat can even be a reference in the diet of convalescent patients. It should be noted that a rabbit breeder is a person performing a job that requires great personal devotion, for which, he must assume responsibility and dedication, although he has limited economic resources to achieve the success of the farm. There are informal and formal producer organizations through cooperatives in South American countries, supported by public policies at various times, although without having proper continuity.

Pet rabbit production

Currently social networks are an important tool for pet rabbit marketing, facilitating access to clients located in the smallest cities. These social networks, are an economic way for the pet breeder to promote his animals and products. There are also government programs to support micro-entrepreneurs that stimulate the creation of the pet rabbit. Activity that is visualized as gaining greater force or popularity in Brazil. It was emphasized that pet breeders from developing countries are very creative people and are able to look for alternatives, in order to solve their problems. In addition, there are large numbers of people interested in investing in rabbit breeding.

Another important reason for acceptance of the pet rabbit, is that it has gained preference in the homes of countries like Brazil, and every time more and more population is getting to know the advantages of having this animals in their houses. Since, it is a pet that is not noisy, its maintenance is cheap and interacts well with other animals, and can be well adapted to vertical housing. Today there is a great movement of pet rabbit breeders who are slowly organizing and spreading their activity mainly through events, as has recently happened in Brazil in the states of Rio de Janeiro and Minas Gerais. Besides everything, there is a great potential for the activity of "rabbit-therapy", which has been used in some places in Brazil, for the improvement of cognitive development of students with disabilities. Even in this topic, for the pet rabbit breeding, it was perceived that in



Brazil, a large number of pet rabbit breeders are young people and have a higher education level.

2. DIFFICULTIES OF DEVELOPING COUNTRIES FOR THE GROWTH OF CUNICULTURE

General rabbit breeding and human feeding

Among the main difficulties, it is observed that the costs of rabbit feeding are high and reach around 80-85% of the total cost production, as it occurs in Argentina and Mexico. Practically in all the American developing countries, the culture of rabbit meat consumption must be promoted, in addition to the lack of organization among rabbit breeders; a vicious cycle is observed: not much is being produced because it is not sold or advertised or rabbit meat is not been sold, since it is not been produced or advertised, therefore there is no market guarantee. There is scarcity for diffusion of the rabbit meat characteristics or even worse, it is nonexistent, and there is a lack in the general interest for the dissemination of this subject. There is also a lack about dissemination of the benefits of rabbit meat consumption and the easy management required for its production. In addition, compared to other meat products, the annual rabbit meat consumption per capita is very low, being able to quote an average of around 0.2 kg year in Mexico, 0.12 kg in Argentina and 0.008 kg in Brazil. In contrast, in the Mediterranean countries, the average per capita annual rabbit meat consumption is around 2 kg. Although governments support programs related to rabbit farming, much more needs to be done in order to change this particular situation.

In countries like Argentina, the production cycle and delivery can be a problem; boom cycles and a significant fall in rabbit meat production recently occurred. Considering the Argentine example, despite the high productive capacity, the production generated to export was compromised, and could not be directed for local consumption, since it was excessive for it (in 2001 to 2005).

In Brazil, the number of slaughterhouses in the country is very low and that limits the production flow, therefore, transport costs are high. Referring to animal transportation, there is no help from the slaughterhouses directed to the rabbit



breeders. In Brazil, as in other countries, there is too much bureaucracy and a large number of rules and regulations to open a slaughterhouse, even if the meat sale is intended within the same municipality. Therefore, much more government support is needed for the sustainable development of the rabbit breeding sector.

In addition, in Brazil, it is necessary to develop an entity that centralizes the supply and demand of the rabbit products, that is, a centralizing agent. In this sense, many times those involved in this activity, feel abandoned and discouraged to continue in the rabbit breeding. Even in the analysis of the specific situation in Brazil, there is a lack of qualification of the professionals involved in the activity. There are no remote learning rabbit breeding courses for rabbit producers, which would facilitate access to information. On the other hand, the price of rabbit meat in the market is very high, so it is an obstacle to increase its consumption. This price varies a lot, ranging between R \$ 35.00 and R \$ 70.00/kg (9.00 - 18.00 USD/kg or 7.90- 15.80 €/kg), which contributes to a single purchase of the product. In Europe, this price is around 5 euros, these values being very competitive. The high cost of Brazilian production makes it impossible to export rabbit meat to other countries, including Europe, since the price is very uncompetitive. In addition to this, is the high price paid for low to intermediate quality rabbit feeds.

High mortality present in the rabbit farms, is also a problem, reaching levels of 20%. There is also a lack of good quality equipment. Rabbit industry equipment is produced in Europe and results very expensive to import it for the developing countries. There are no private companies interested in supporting the rabbit breeding sector, and to give a concrete idea, about 90% of the companies that were contacted to ask for financial support to do the VI American Rabbit Congress, did not answer the request. In addition to all, rabbit breeding is still considered as a secondary activity, that is, it is not the main economic activity for most breeders. This fact limits the activity growth, since the efforts for improvement is not as high as it could be, in other words, rabbit breeding does not represent a priority for most people. Finally, the diffusion of the Botucatu Brazilian rabbit is difficult, mainly due to the distance issues.



Today, within the educational institutions, exists a situation that most of the time goes unnoticed, where professors and traditional specialists in research and teaching about rabbits are retiring, without having the necessary personnel renewal, as it is happening in Brazil and Uruguay. There is great concern in Brazil about the uncertainty about maintaining the animals of the Botucatu genetic group. On the other hand, much of the research done in the institutions does not arrive or is not applicable to real field situations and most of the time the problems reported by the rabbit breeders are not taken into consideration by the researchers. Yet, there is a low use of bio-reproductive techniques by rabbit breeders, and practically no one uses light-stimuli programs, artificial insemination or other fertility enhancement techniques.

Even in developing countries, there are still many difficulties encountered by educational and research institutions of agrarian sciences, mainly related to infrastructure, access to contact with the rabbit breeders and prejudice against rabbit meat consumption. In most cases, the rabbit-breeding sector does not receive support from educational institutions or from promoting agencies, in order to finance research and extension projects.

Pet rabbit production

Similar to what occurs in the rabbit meat breeding, there is also a lack in organization among pet rabbit breeders, which majorly continue working in an isolated manner. There are not yet in Brazil, as in other developing countries, organizations that could document, standardize and certify the rabbit breeds within countries, in which case, that race certification through genealogical records could be essential to maximize profits. Performance of animal shows is expensive and complicated, mainly by the rigorous current sanitary rules. Currently there are a few events involving rabbits, while in countries like the USA, thousands of events are being held year round. Just as happens with the meat rabbit breeding, the pet rabbit breeders lack of qualification.

Even for pet rabbit breeding, there are no opportunities to train breeders, who need to improve their customer service, since their work continues with



different visits and consultations after having made the sale of rabbits to the new owners.

3. SOLUTIONS FOR CUNICULTURE IN DEVELOPING COUNTRIES

General rabbit breeding and human feeding

New government policies are needed to strengthen the rabbit production activity, as well as the integration with public institutions, in order to help the rabbit breeder, mainly if an accessible language is used in the technical materials. Permanent links with international institutions can also be of help in this regard. The teaching of a culture of rabbit meat consumption for children at school, as well as the adoption of a routinely rabbit meat supply on school menus, can also facilitate rabbit acceptance. It is desirable that the rabbit be present in the family farming, and encourage children to dabble in the knowledge of rabbit breeding in general.

In addition to stimulating the consumption of rabbit meat, these programs could also help in the fight against hunger. In order to stimulate the consumption, dissemination of the benefits of rabbit meat from the mass communication media is fundamental. In this sense, allocating part of the profits of the rabbit breeders and slaughterhouses for this purpose is a must, however, that can only be done when the rabbit sector gains a higher organization level.

It is necessary to improve the offer and demand logistics of rabbit meat in the developing countries, in this sense, a national entity can help, as a national confederation in each country. Although every effort is made to improve rabbit production, it is necessary to have contact with the mass communication media to encourage consumption through publicity. Disclosure in restaurants and other culinary sectors is also important. Cultural events and food fairs are important for the promotion of local rabbit breeders.

Investing in the genetics of animals can be important for developing countries, to use lines adapted to their own climate and environment. In the case of Brazil, a solution for the maintenance of the Botucatu genetic group, may be



the creation of a network of breeders that can have access to that genetic and can be obtained at low cost.

It is also clear that the rabbit breeders have to organize and act, not waiting for the governments of their countries to take initiatives to do so. It is also necessary to qualify the breeders, offering distance courses. In addition, the breeders themselves must offer stays in their farms for all those who wish to qualify, including Agricultural Technicians, Veterinarians, Zootechnicians and Agronomists.

A fundamental item, is to consider innovation for the development of rabbit breeding. In order for the research to be efficient and applied, the rabbit breeders have to identify their problems on the farm and transmit their needs to the researchers, in order to bring the research and its advances closer to the realities and needs of the producers and thus, ensure that the results of the investigations can be adopted on the farms. For this, it is necessary to carry out a coordinated work by the association of rabbit breeding of each developing country with the universities and research institutes.

Also considering that the feeding costs are very high, the rabbit breeders must unite, so that they can make collective purchases of balanced feed, thus being able to negotiate directly with the factory. Merging of associations of small groups may be the beginning. Grouping interests facilitates production, such as collective purchase of ration, as well as equipment, for example.

There are examples of countries where rabbit breeding has developed significantly such as Spain, where the use of farm management programs, allows for a better economic management of the breeders associated to the programs. In this situation, the rabbit breeder should be the main agent for data collection. Other example is the Spanish fortress, the ASESCU, which is an association of researchers, technicians and rabbit breeders aimed to spread knowledge about rabbit breeding.

In countries such as Brazil, adaptation to these conditions becomes more difficult, since it has a large territorial area, difficulties of displacement, low level of rabbit breeding technology, low level of qualification of those involved, in the vast majority of the growers. Rabbit farming is a secondary activity. However, the Brazilian Association (ACBC) could help in the process of dialogue among those



involved, although its structure and resources are extremely limited. In addition, the ACBC comes with some events, without defined periodicity, such as the day of the rabbit breeder in 2011, SENACITECs of 2012 and 2013, in addition to the Brazilian Journal of Cuniculture, the Rabbitry Bulletin, although this is a voluntary work, done during extra working hours of teachers.

Pet rabbit production

It is necessary that the pet rabbit breeders make alliances with professionals that can help them in the activities, advising these professionals to the new rabbit owners. In addition, the pet rabbit breeder must invest in the after-sales relationship and dissemination of their activity, in this sense the preparation of marketing material is essential. Photography companies can be important allies for the promotion of pet rabbits. Other options are the dissemination of their work during radio interviews, television and at shopping centers, to attract the public. However, the fundamental thing is that there is organization among the rabbit breeders, so that costs are divided and disclosure is increased.

It is necessary to train rabbit breeders and technicians, offering stays in the farms. Marketing and post-sales courses are essential. The creation of a genealogical registry service is crucial, so that more value is added to animals and profits are increased during sales. The "rabbit therapy" has a strong social attraction and needs to be taken to schools that work with disabled children, being a potential ally of the rabbit breeders in order to spread their business.

4. QUESTIONS AND SUGGESTIONS MADE BY THE PRESENT AUDIENCE DURING THE DEVELOPING OF THE ROUND TABLE

This round, counted with the participation of assistants from Spain, who suggested conducting distance on-line-courses to train rabbit breeders, as well as the creation of networks of researchers, extension agents and producers, to disseminate the knowledge in rabbit breeding, with results of their research and experiences.



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Meanwhile, assistants of Nigeria, applauded the way in which the discussion of the different points treated in the round table was made, since it allowed to see contrasts and coincidences in the rabbit breeding of the different participating American countries.

On the other hand, students and producers from Brazil, as well as researchers from Mexico, supported the initiatives presented to solve the problems faced by the rabbit breeding in the different American countries, who also thanked the comments of the European assistants.

Finally, it was made clear that by working collaboratively in favor of the rabbit breeding, both locally and internationally, the strengthening of this activity is encouraged, and the sharing of diverse experiences helps to learn and improve in the different areas of knowledge.

Goiania, August 28th, 2018.