Edition nº 2 - Latin America and Caribbean, Jan/Feb/Mar/2014

# IE@4M

#### **Dear Readers**

With great pleasure we release the NL IAHA 2, the first Edition dedicated to Latin America and the Caribbean. This region is characterized by rich biodiversity and presents several different biomes. In all of them there are great examples of organic husbandry, demonstrating both the technical and economic viability of this production system where social and environmental benefits are also evident.

More than a billion people worldwide and 70 % of the 880 million rural people living on less than US\$1.00 per day, depend on at least part of the raising of animals for their livelihoods (FAO, 2012). In recent decades, livestock has had a great development, especially in the southern cone of Latin America. This is due to favorable natural conditions: large areas of pasture, favorable climate, grain and tradition of cattle raising.

However, approximately 70% of grazing areas in Latin America present various degrees of degradation process. Furthermore, the growth of livestock, twice the world average, impacts severely the natural resources, especially the loss of forest cover. Moreover, the bovines have been blamed for contributing to the greenhouse effect due to the release of methane from animals.

In 2001, the FAO recognized and pointed out the agro-ecological model as a solution for ending world hunger and reversing the degradation due to the current industrial model. It has been demonstrated that cattle in organic or agro-ecological systems, moving freely in well-managed pastures, not only do recover degraded areas, but also capture carbon by the action of micro flora and fauna in the soil and by the pastures (PRIMAVESI, 2007). In addition, cattle naturally fertilize the soil and transform pasture into protein food of high nutritional value.

In this Edition we have aimed at showing various initiatives, public policies and successful experiences of organic husbandry that are taking place in several countries of this continent, involving many animal species. We also hope that this Edition will serve to bring closer people who are working in this area.

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In short, we demonstrate the feasibility of a system that is productive and, at the same time, considers the people involved, respects the environment and the welfare of animals. Such a system has proven to be economically viable by producing tasty, nutritious and toxic free food.

We thank all of those who contributed to this Edition, which we hope will serve as a reference and source of inspiration for many who are engaged in building a healthier and more harmonious world.

Angela Escosteguy

Member of IAHA

President of Welfare Institute
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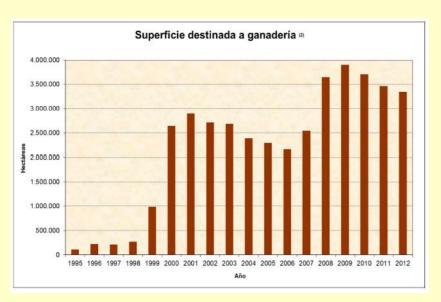
# Overall context of organic animal production in Latin America and Caribbean

#### **Carlos Andres Escobar Fernandez**

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Latin America and the Caribbean region the third largest certified according to the standards of organic agriculture worldwide in countries which Brazil, Uruguay, Argentina, Mexico, Paraguay, Dominican Republic and Peru are recognized about it. Also, about 315 thousand producers are linked to the organic agriculture, especially growing coffee, cocoa, oil palm, mango, banana, cardamom, sugar cane and other crops.

With regard to organic animal production, the figures are not commonly available and differentiated. It stands about Argentina where nearly 90 % of the certified area is devoted to organic animal production, particularly sheep (880,000 heads) and cattle (67,400 head) in an area of 3,345,211 hectares See chart data from SENASA - National Health Service and Food Quality, of Argentina, 2013.



In other countries experiences are focusing on meat and dairy cattle and poultry production, mainly. Overall, organic animal production is a potential in Latin America and the Caribbean for most countries for both their domestic markets few developed and international markets considering that many of these countries are under competitive pressures by free trade agreements.

The Latin American organic animal production is characterized by favorable factors such as continued access to natural grasslands but turn low access to organic feed, lack of knowledge and use of alternative medicines in animals and insufficient trained staff techniques in organic livestock constitute major challenges to overcome for further development at different scales.

Yet, mostly based on cattle production systems of silvopastoral type, current organic experiences are showing that not only is enhancing natural resources, but by offering a more balanced diet and local, may produce better meat and milk, increase the number of cattle per hectare and reduce methane emissions and the use of fertilizer, which helps to reduce the effects of global warming.

According to several studies in different countries, under conventional conditions, the average weight gain of an animal between 200 and 300 grams per day, and eats less one head per hectare, but by establishing silvopastoral systems have been observed weight gains of at least 750 grams per day, thereby achieving feeding at least four animals per hectare / year and also animals take less time to reach their ideal weights favoring the meat quality and improved productivity of grasslands. Similar effects have been observed in dairy cattle. In alternative poultry system there is not information disseminated.

It is also important to mention that, in addition, the World Bank, FAO, CATIE and CIPAV, among others, are implementing a project where the benefits of payment for environmental services to the sustainable livestock are evaluated as a strategy to promote a process of conversion the prevailing animal production systems (extensive use of land unsuitable for livestock, etc.). The aim is to find a middle ground between production and conservation of natural resources.

Under this full of opportunities context, the IFOAM's Group of Latin American and Caribbean taking advantage of the existence of the IAHA platform and, incidentally, the formation of a new board for 2014 - 2017 is committed to promote greater dissemination of experiences existing in the region through events and systematization articulated platform and, in turn, influence the improvement of information systems of countries to access more reliable data.

The IFOAM's Group of Latin America and the Caribbean applauds and encourages all institutions and individuals to make the necessary efforts to build an inclusive knowledge network that favors the development of organic animal production.

To contact the group, write to info@latinamerica.ifoam.org.

# A quick look at livestock production in Mesoamerica

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The organic livestock production in Central America is characterized by small producers (< 10 heads), in integral farms (crops and livestock) with animalsfor both purposes: milk and meat. Mexico is the country with the greatest development in the region, with approximately 15,000 hectares of organic livestock farming, which, although dominated by small producers, it also has extensive livestock producers, with more than 70 head of cattle. In Mexico, a third of the production area is located in the state of Chiapas (5450 ha), with an annual milk production of 500 000 litres, 95 % is used for cheese. Most of these 70 producers in Chiapas, are organized in small producer organizations, of which 50% are already certified with Participatory Guarantee Systems (PGS) while the other 50 % are in transition. The cheese they produce is sold in the "tianguis" or local organic markets.

In Costa Rica, where there is a tradition of intensive farming on very small farms (1-5 ha), with semi - housed animals, the absence of a supply of organic concentrates nationwide, has limited the development of organic livestock farming.

There are projects in the north of the country to encourage the production of organic soybeans, corn and legumes but still a very small scale. Unlike other countries in the region, in Costa Rica there is a growing demand especially for organic dairy products for local consumption.

#### **DEMANDS**

Among the major constraints that are reported for the region, are the lack of a market that recognizes the benefits of organic products, the lack of specialized technical assistance, lack of training of farmers, and lack of state support. Among the topics where there is a major gap in research is the subject of animal health, especially on the subject of internal and external parasites such as ticks and "tórsalos" (Dermatobiahominis). That is why in this year (2014), the Master Program in Organic Agriculture, of the National University in Costa Rica, is organizing a course on Animal Health, which will be facilitated by the Brazilian specialist in Veterinary Organic Livestock Angela Escosteguy (for more information visit the site www.agrarias.una.acr.cr).







#### IFOAM conducted leadership training in agroecology and organic production in Mexico \*

In November 2013, experts and leaders in organic products from Colombia, Brazil, Peru, Costa Rica and Mexico completed the leadership training course in agroecology and organic production in Latin America, held in Oaxaca, whose purpose was to exchange experiences and analysis of the course of the international organic movement. The call was in charge of the Mexican Society of Organic Production and IFOAM.

Gabriela Soto, from Costa Rican and Vice President of IFOAM concluded that "the impact of this event of permanent exchange to strengthen the organic transcends academic, since the two organizations will be strengthened and also international recognition of Organic Agriculture as a strategy to meet the challenges of the millennium.'

The Executive Director of IFOAM, Markus Arbenz in participating in this event stated that "Mexico and Latin America generally grow relevantly both area and number of organic producers in the international market is rolling his eyes in these countries". He also added that the recent publication of guidelines for organic production in Mexico, has put the country on the verge to negotiate equivalencies with importing countries.

Participants in this event constituted a network movement in Latin America. This course will be held this vear in Peru.

\*http://mexicorganico.blogspot.mx/2013/11/exitoso-internabio-deexperiencias-en.html

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# Animal welfare and organic production can jointly contribute to sustainable development

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The concerns for both animal welfare and organic, sustainable, production share similar and complementary motivations. Organic and animal welfare motivated consumers are basing their food choices on ethical values. The choices, oftentimes, reflect an understanding that additional health benefits may arise with the consumption of organic and animal welfare certified products. One example is the recent research work of Benbrook e collaborators(2013) (DOI:10.1371/journal.pone.0082429) who reported a superior fatty acid composition in organically produced milk, when compared conventionally produced milk. The assumption, from the consumers, is that organic, sustainable systems always better animal welfare outcomes, conventional non-organic production systems. However research has demonstrated that animals kept in some organic production systems may also experience unacceptable standards of animal welfare. There is a growing need to develop welfare assessment protocols and certification programmes to allow organic producers to promote good animal welfare practices.

#### AWIN PROJECT - Animal Welfare Science Hub

The availability of scientific valid, reliable and practical animal based welfare indicators is of extreme importance to promote good practices. To meet these demands the Animal Welfare Indicators - AWIN project (www.animal-welfare-indicators.net), which is sponsored under the EU VII Framework programme, with 11 institutions in 8 countries was developed. The main objectives of the AWIN project are: a) to develop and validate welfare assessment protocols, including pain; b) to promote understanding on the relationship between diseases and animal welfare; c) to share research information on the impact of prenatal and early neonatal experiences on welfare and health outcomes and d) to promote global networks of excellence in animal welfare science. Global networks of excellence are available through the AWIN internet-based portal: the Animal Welfare Science Hub (www.animalwelfarehub.com). The Animal Welfare Science Hub is promoting transparency, stimulating discussions and providing easy-to-access, peerreviewed, information in animal welfare science worldwide. The Hub is also repository of information on global opportunities in education, training and capacity building in animal welfare and related topics. It is a dynamic, interactive, platform to develop and host 'learning objects'.



One of the main drivers for improvements in animal welfare has been the concern that it may become barrier for international trade. The World Trade Organisation (W.T.O.), for the very first time, determined that the concern for animal welfare, represented by the slaughter of seals, was a legitimate reason to ban trade of products to the EU countries. This landmark resolution to the "dispute DS400", will, likely, open precedent to prevent the commerce of animal products which fail to meet animal welfare standards established the importing countries.



In conclusion, Animal Welfare and Organic production systems have the potential to connect producers and consumers fostering global networks which could become an important asset to promote sustainability in our fragile and vulnerable planet.

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The images are from farms in south Brazil.

# Intensive Silvopastoral Systems (ISPS) for sustainable cattle ranching in Latin America

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#### **INTRODUCTION**

In Latin America the dominant cattle production system has led to environmental degradation at all levels and in almost all tropical and subtropical terrestrial ecosystems. However, cattle can be managed sustainably with silvopastoral systems of various types where intensive silvopastoral systems (ISPS) stand out. In addition, herds that are managed with sustainable criteria are a tool for landscape-scale restoration that are integrated connectivity corridors between forests, rehabilitate degraded lands and help protect water resources by reducing pollution and sedimentation. More recently evidence has been provided to support the idea that silvopastoral systems with integrated management of agroecosystems allow processes to mitigate and adapt to change.



INTENSIVE SPS AND AGROECOLOGICAL CATTLE PRODUCTION

Cattle intensification with iSPS uses agroecological principles that maximize the efficiency of several essential biological processes such as photosynthesis in three or four layers of vegetation, nitrogen fixation and nutrient recycling in order to increase the production of biomass and enhance soil organic matter. Inputs to silvopastoral systems are biological processes and not fossil fuels or synthetic compounds and modern scientific knowledge is applied to combine and manage species of different characteristics and functions. The iSPS are a good example of the natural way of agriculture, agroecology, which has a special place in the contemporary world. In summary these models generate high quality food for the population in a profitable way, and at the same time generate rural employment, strengthen means peasant life and benefit the society with the provision ecosystem services.

For the proper functioning of iSPS it is required to have a permanent water supply in mobile troughs, mineralized salt, living fences on the periphery and internal divisions, mobile or fixed electric fencing to concentrate grazing in strips and cattle management with good sanitary practices and animal welfare.

SCALING UP ISPS

Now that producers and policy makers know and appreciate these models that are useful for dealing with climate change, competitiveness and sustainability, its rapid expansion to regional and landscape scales is required. To achieve this, we must overcome significant barriers of all kinds starting with changing bias relative to the trees that grow in pastures and avoiding the use of monocultures. The higher initial costs involved in establishing most of the iSPS are an obstacle for small or undercapitalized farmers. Funding for technical assistance and silvopastoral extension is needed at all scales and as a prerequisite it is necessary to provide specialized training to technical assistants.

In order to scale up iSPS in Latin America, it is required that public policies facilitate adequate funding for the initial stages of the system and that products, such as milk and meat can be traded with incentives and market preferences because they generate high quality ecological products for the society.



Cotija cheese type certificate of origin and produced in SSPI

Farm Los Huarinches, Mexico

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## **Brazil Agro-ecological**

### **National Plan for Agroecology and Organic Production**

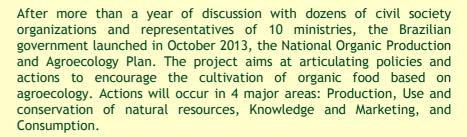
BY Angela Escosteguy, Member of Ifoam Animal Husbandry Alliance, angela@ibembrasil.org





Published in 2009, the Federal Law 11,974 establishes that 30% of the funds sent to school meals must be used to purchase food coming from family farms. In addition, schools should always prioritize the purchase of organic food. There is even an increase of 30% in sales value that can be given to producers of organic products of vegetable and animal origin.

It is estimated that this measure will benefit 64 million students and thousands of small organic producers as it will ensure the production sales.



Ten ministries are involved in the plan to contribute to the socioeconomic development of Brazilian farmers and environmental preservation. The goal is to expand and strengthen the production, handling and processing of organic products, having as a priority public farmers, agrarian reform settlements, people and traditional communities and their organizations.

The investment will be 4,2 US\$ billion in three years. Most resources, 3,2 US\$ billion, will be available through the National Program for Strengthening Family Agriculture and the Agricultural and Livestock Plan, and 1 US\$ billion will be allocated to specific actions, such as training and promotion of technical assistance and rural extension, development and deployment of technological innovations and increased access to institutional markets, such as the Food Acquisition Program and the National School Feeding.

The goal is to support 75,000 families with technical assistance focused on organic production, and support farmers to be successfully granted the certification as organic producers. The country currently has about 10,000 certified farmers and the goal is to reach 50,000. According to the Brazilian government, the aim is to increase the supply of organic products, to scale production, increase income of farmers and also reduce the cost to the consumer.

In short, the Brazilian government take on a more advanced attitude which is not only limited to the control actions through laws and supervision, but also structures a plan for the strengthening and development of the sector. It point to a paradigm shift, for it is the establishment of a transformation process to provide universal access to organic food that goes beyond simply certifying and inspecting products that can be consumed by an elite population. For Miguel Altieri, a global reference on the subject, Brazil is the only country that has a law and a government plan in agroecology and because of this is leading this process.



# VET.ORG enables important advances for organic husbandry in Brazil

The Vet.Org - Committee on Organic Farming of the Brazilian Society of Veterinary Medicine proposed two motions that were approved by the participants of the 40th CONBRAVET - Brazilian Congress of Veterinary Medicine , held in November 2013, in Bahia/Brazil.

The first motion requested a referral to the Ministry of Education to request the inclusion of the subjects Organic Husbandry, Homeopathy and Medicinal Plants in the curricula of the graduation in Veterinary Medicine. The second motion requested that performing a Brazilian Seminar on Organic Husbandry in all upcoming Brazilian Congresses of Veterinary.

The proposals were justified considering the increasing global concern for the pursuit of sustainable systems of food production, the qualitative and quantitative development of organic husbandry in the country, the increasing demand for organic food and the recent public policies that support, and demand actions of professionals specialized.

For Angela Escosteguy, President of VET.ORG these measures are very important to capacitate veterinarians to work in this new professional area attending the demand of breeders, researchers, teachers, students and other related segments, as this issue is not part of the curricula of graduation in Veterinary Medicine in the country.

## **Zoostener – Sustainable Zootechnics in Peru**

"Never doubt a small group of thoughtful, committed citizens can change the world in fact are the only ones who have achieved"







We are a group of volunteers, formed by current students and graduates, from Zootechnics Engineering Faculty of La Molina Agrarian University in Lima, Peru. We try to resolve some problems we saw in our medium as: lack of youth participation and involvement with the rural communities and familiar agriculture; incongruity of the model of industrial animal farming with the global challenges like hunger, poverty and climate change; finally, the single approach about development as economic growth, not including social and environment aspects.

The high rural migration, the discrimination to live and work in the rural sector, the waiting of the externs actors to resolve different local issues, among other things, are social problems we try to help sharing with them messages like: "We don't inherited land from our parents, we took it borrow from our kids", "No piece as heaven as my land", "The best way to predict the future is creating it", and many more.

This year we've been working together with one private company called VacasFelices (Happy Cows), promoting sustainable productive activities through the milk production in two Rural Communities in Highlands of Lima.

Across all this time, we've been developing in the University topics with their respective talking, discussing and field trips in: Agroecology, Organic Production, Sovereignty and food security, Animal Welfare and Livestock Waste Management.

Last September we co-organized the Symposium of Ecological Livestock in the SOCLA (International Congress of Agroecology). By the time, we're working with other groups in the University conducting activities under the "COPinMyCity", we're sensitizing, informing and taking action about global warming, and about the COP negotiations, because next year we'll have the COP meeting here in Lima. Finally, we have a Facebook page: www.facebook.com/Zoostener, where we share information about Ecological Livestock, and many other things, where anybody can contact us too.

Zoostener was formed like an initiative of a small group of friends, who think that "To build a different world, we just can't be indifferent". And it's so, that one year after the foundation of the group, here we are, 25 young volunteersfull of desire and conviction to change many things for good. Contact person: Diego Valencia, candieva123@hotmail.com.

#### Guinea pigs are the major source of animal protein in Andean countries

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Guinea pigs (*Caviaporcellus*) are a major source of animal protein in some Andean countries (Peru, Ecuador, Bolivia). This very prolific animal is often found wandering around the kitchen in a typical traditional household, eating food scraps and leftovers. Gathering grasses and other types of forage plants is an important activity, generally undertaken by women, children or the elders.

Nowadays guinea pig production can also be a commercial business and, because of the traditional culture it comes from and the very high quality of its meat, it has found its place in top restaurants and as a main character of the Peruvian gastronomic boom.

Bioagricultura Casablanca is a certified organic model farm in the outskirts of Lima, Peru. Carmen Felipe-Morales and Ulises Moreno have trained thousands of students and technicians in their family farm, where guinea pigs are the essential source of manure for compost and biogas production and provide main income as meat.

# **Populational Homeopathy**

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Homeopathy applied to domestic animals is booming in Brazil and many other Latin American countries. Currently it is estimated in Brazil about 25 million bovines (milk and beef) receive the benefit of this therapy. Homeopathic medicines have also been used successfully in other species such as birds, fish, buffalo, pigs, goats and domestic animals as well. The use of homeopathy in animals has been growing at around 9% per year in Brazil, due to the good results.

This is highly positive for society in general, since it allows the consumption of healthier, free of toxic waste on human health food. In Veterinary, the Homeopathy is mainly applied prevention therapy, and therefore ideal for organic systems of farming.

#### **ACTION**

Therapy created by the German physician Samuel Hahnemann in the 18th century, acts on the Natural Law of Cure known as Law of Similars, similibus Similibus curantur. The drugs used are highly diluted and dynamized, which prevents the animals to suffer any kind of problem or accumulate toxic waste in the body becoming a therapy free of restrictions as to its use.



#### POPULATIONAL HOMEOPATHY

In Brazil the expansion of homeopathy in large herds is a reality not experienced in countries in Europe or North America. Through extensive research and studies, Vet Prof. Dr. Claudio Real Martins in the 80s created a new method that enabled the extension of single use dressing and advocated by Hahnemann for large animal populations. This new method called Populational Homeopathy seeks not only to eventually treat diseases and, above all, to act in the prevention of it by restoring the balance of organic animals, permanently compromised by inadequate management practices.

Thus, animals organically balanced, have their defenses and increased productivity through the promotion and expression of their real genetic potential, resulting in increased health, fertility, weight gain and productivity.

#### **USAGE**

This method is very simple to use and does not cause stress to the animals because the drugs usually are aggregated to mineral salt or food or water. Thus they receive the stimulation of medicines without the need for any special handling. The opposite occurs in the conventional practice, where any application of medication requires intensive and stressful managements.

The growth and expansion in the use of Populational Homeopathy in Brazilian herds is due to:

- The Homeopathic medicines do not become resistant against parasites and microbiological agents;
- Food from animals receiving homeopathy does not need of lack in their consumption;
- Reducing and even eliminating the use of synthetic chemicals that have impacts both on human health, animals and the environment;
- Simplification of management and labor with animals with lower costs and increase animal welfare;
- Troubleshooting where conventional chemical treatment does not solve;
- · Reduction in the cost of treatment;
- · Increase in organic herds.

In Brazil the involvement of Brazilian veterinarians for Homeopathy is growing. The Veterinary Medical Association of Homeopaths of Brazil, was established in 1993 and currently already exist in the country several specialization courses in homeopathy.



Homeopathic medicines can be added in the mineral salt, in drinking water or in the food, without changing its taste.



# Pantanal: breeding and preservation

99,000 bovines in 131,000 hectares certified

By Angela Escosteguy, Member of Ifoam Animal Husbandry Alliance, angela @ibembrasil.org

A partnership between WWF - Brazil and associations of organic producers in the region has made the Pantanal Forever Programme possible since July 2003. The partnership goal is to promote the conservation of biodiversity through the creation and implementation of conservation, preservation of species, stimulating economic activities with low environmental impact and promoting sustainable development.

The program works with the promotion of certified organic livestock production as a sustainable alternative for the region. The design enables the highest concentration of organic cattle in Brazil. There are 26 farms with approximately 131,000 hectares in pasture and about 99 thousand head of cattle certified. The average slaughter is 1,000 heads / month.

The sanitary control of animals is carried out with preventive management and the use of homeopathic medicines added to mineral salt. Most organic meat produced supplies the domestic market, but a share is exported to Italy.



Located in the heart of South America, the Pantanal is the largest wetland in the world. Its basin covers an area of 624.320 km2, of which 61% are located in Brazil, 20% in Bolivia and 19% in Paraguay. It is a peculiar region not only for its natural beauty but also for its role in biodiversity conservation.

This vast reservoir of fresh water is very important for the protection of freshwater ecosystems, climate stabilization, land conservation, and the maintenance of its rich biodiversity. It is home to 122 species of mammals, 263 species of fish, 93 species of reptiles, 656 species of birds, 1,032 species of butterflies and 1,647 species of flowering plants.

Due to its environmental importance, the National Heritage biome was decreed by the 1988 Brazilian Constitution, and World Heritage Site and Biosphere Reserve by the United Nations in 2000.







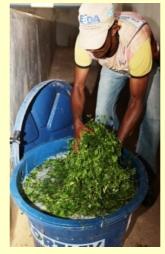
The program also includes actions such as:

- Recovering of degraded areas and preserving the streams and forests
- Encouraging owners to create official protected areas
- Compliance with labor laws, dignified housing for workers, schools and training on the standards organic production.

Livestock contributes to conservation of 87% of native vegetation of Pantanal (EMBRAPA, 2010)

Studies have shown that extensive livestock farming practiced in the wetland preserves the environment because analysis showed that% 87% of the native vegetation of the biome is intact, the most conserved biome in Brazil. These results demonstrate that organic livestock can coexist with the natural environment, adapting to their conditions and generating less impact on biodiversity and other ecosystem services.







# **Organic milk in Northeastern Brazil**

#### **Antônio Vicente Dias**

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The Experimental Station Aramarí (EEA) linked to Bahia Agricultural Development Company (EBDA) linked to state government, was created in 1992 to work with milk cattle and buffalo. Located in the municipality of Aramari, Bahia it has an area of 806 ha, lying in the field of ecological subhumid tropical, with an annual water deficit of 300 to 400 mm, mean annual temperature of 24.5° C. The station is divided into three areas to conduct further research and extension: survey of buffalo (323 ha), environmental preservation (136 ha), and research with dairy cattle (347 ha).

In the beginning, the handling of animals has been carried on according to the conventional model. However, from 1998 on, the organic farmers started to look for information about the use of homeopathy. The search for information showed that there were no significant solutions, in the national and international levels, so tests with the homeopathic medicines were started. In 2003, during one of the visits with the Executive Director of Livestock, an heifer calf with the age of 5 days presented a severe pneumonia treated with homeopathy. As the animal recovered rapidly, the Director decided to support the proposal of transformation of the EEA in reference center for the organic production in the State. It was the first Center in Brazil to work in this area. This decision and the fact that the last chemical fertilization of the pasture had occurred in the year 2000, conducted to the elaboration of a new project, based on agroecological and organic production principals. So, in 2003, the process of conversion started permanently. In 2006 the EEA started to be certified as organic.

The Station also has a dairy-school to train producers in the processing of milk and dairy products in accordance with the principles of organic production. Since 2009, the activities were diversified according to the principles of agroecology and it was initiated he installation of two areas with agroforestry.

#### **BREEDS AND PRODUCTION**

The buffalo herd consists of 60 buffaloes, half Murrah and half Mediterranean race. The cattle herd consists of 80 crossbred dairy cows (basically Holstein, Jersey and Gir). The average daily production is around 250 kg of buffalo milk and 350 kg of cow milk.

#### **HEALTH MANAGEMENT RESULTS**

Homeopathic medicines are offered mixed with mineral salt for the prevention and treatment of endo-and ectoparasites. When necessary, we bath animals with leaf extract of neem (*Azadirachta indica*) in aqueous solution. Vaccinations are mandatory or necessary in the event of an outbreak. On the day of vaccination, we use a homeopathic medicine to strengthen immunity and prevent undesirable effects.

#### MAIN RESEARCH RESULTS (2006-2013)

- o Control of endo-and ectoparasites of cattle and buffaloes
- $\circ$  Control of mastitis: fell from 15 20 % to 1-2 %
- Control of cattle tick fever: death of calves fell from 5-6% to zero.

#### RESEARCH WORK IN PROGRESS AND PLANNED

- $\circ$  Complementation of work on tick fever
- Organic fertilization for pastures
- $\,\circ\,$  Control of leaf-cutting ants
- o Agroforestry system
- Silvopastoral systemCow comfort







Homeopathic medicines can be administered individually or mixed to salt to achieve the entire herd.

# **ORGANIC EGG PRODUCTION IN SÃO PAULO**

#### Production is estimated in 98 million units in 2012

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The egg production in Brazil reached 31.77 billion units in 2012, with the state of São Paulo, the biggest producer, accounting for 36.59% of the whole Brazilian production (UBABEF, 2013). Despite the lack of official data on the volume of organic egg production in the state of São Paulo, based on information provided by certifiers and on Buainain and Batalha(2007), production is estimated at some 98 million units in the state of São Paulo in 2012.

The organic egg producers in the state of São Paulo are divided into two groups with the following social and economic profiles:

- 1) Medium-sized companies or agro-industrial units, with technical assistance and medium-to-large investment capacity:
- 2) Small or medium sized farmers, with or without technical assistance and low investment capacity.

In the first group 5 companies stand out, which shelter 5 to 20 thousand birds each totaling approximately 80 thousand birds sheltered. Their production is distributed by local and state supermarkets, organic product street markets and doorstep sale baskets. The second group is formed by family-agriculture producers and small- and medium-sized farmers. This group's production is basically distributed at organic product street markets.

There are no official, specific data on the volume of organic egg production by this group. However, according to the Ministry of Agricultural Development's data quoted by Guilhoto et al. (2007), poultry farming is among the activities with the highest growth in the family-agriculture sector. Because 83% of organic production establishments in Brazil are held by family-agriculture farmers (IBGE, 2006), egglaying poultry is an important activity for enhancing social inclusion and food security.

#### **ZOOTECHNICAL MANAGEMENT**

Wide variability is found in both groups, in terms of poultry farm infrastructure and zootechnical management. Group 1 comprises companies like "Farm Toca" in Itirapina, which has 20 thousand birds divided into groups of 5 thousand birds each, sheltered in 4 sheds equipped with fans and foggers and with access to the external area during the day. In group 2 there are breeding systems with free-roaming birds which are fed in open sheds. Even among the group 1 companies, there are diferences in pasture handling options: pickets used on a rotation basis (picture Left ) or a single picket (picture Right ).





(L) Jaguariúna/SP - 10 thousand birds divided into 80-bird groups.

(R) Porto Feliz/SP - 12 thousand birds sheltered in 3 sheds with a

(R) Porto Feliz/SP - 12 thousand birds sheltered in 3 sheds with a non-rotation pasture area.

Despite these differences, all producers mix feed in their properties, by using corn partly of their own-production and partly acquired together with the soybean and mineral supplements required. As in all properties in which vegetable and fruit production activities are combined with poultry farming, the hens are also fed with vegetable and fruits. Additionally, pecking them contributes to the welfare of birds as it reduces the risk of behavioral deviations such as feather-pecking and cannibalism.



Farm Toca - 20.000 hens

Good performance with germinated organic corn

20 grams/bird, during 4 weeks, led to 94% of laying (Sep 2013).

#### **Sanitary handling**

In terms of sanitation, producers from both group report verminosis, coccidiosis and lice-infestation problems, which are reportedly treated with homeopathic and phytotherapic methods (Table 1).

Disease	Treatments used	Preventive Handling
Verminosis	Medicinal herbs: Allium sativum, Musa paradisíaca, Chenopodium ambrosioides Mormodica charantia  Homeopathic products	Pasture rotation
Coccidiosis	Homeopathic products and Medicinal herbs	Vaccine
Lice	Medicinal herbs: Cymbopogon winterianus e Azadirachta indica	Systematic cleaning of facilities and nests and application of silicon where birds stay

Viral diseases can be mostly prevented through vaccination (Marek, Fowl Pox, New Castle, Infectious Bronchitis, Gumboro Disease, Haemophilus sp. and Egg Drop Syndrom), and so can Salmonela, a bacterial disease.

Treatments, if necessary, are made based on medicinal herbs, homeopathic and propolis-based medicines.

#### **PRODUCTION BOTTLENECKS**

Producers unanimously agree that production difficulties are restrictions on use of synthetic metionin for bird nutrition, high cost of organic corn and soybean and the shortage of organic production technicians.

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## **ORGANIC AQUACULTURE**

PRIMAR: First certified organic shrimp in Brazil and first certified organic oysters in the world

By Angela Escosteguy, IFOAM Animal Husbandry Alliance member, angela@ibembrasil.org

Installed in the State of Rio Grande do Norte, PRIMAR has about 40 acres of ponds and provides ideal conditions for aquaculture. Founded in 1993, it started its production with conventional cultivation of native shrimp and has evolved over 10 years to the practice of intensive monoculture Pacific Shrimp, *Litopenaeus vannamei*.

In 2002, the company changed the course of its development, emphasizing the quality and starting the deployment of the system of Organic Aquaculture Primar, in accordance with the guidelines of the Ifoam. In December 2003, Primar obtained organic certification by IBD. Primar is characterized by the adoption and promotion of management practices of low ecological impact, demonstrating its concern for environmental and social respect.

The crops are free of chemicals, pesticides, GMO 's, antibiotics and hormones. There is constant care to reproduce in ponds an environment similar to the natural habitat of cultivated organisms so as to reduce the animal's stress, provide its growth in a healthy way, increase survival levels and minimize the occurrence of diseases. The production is performed by the ecological management of the ecosystem of nurseries, so as to make species benefit from cultivation through natural food chain. For the best use of the various ecological niches, the nurseries are populated with species of different dietary requirements, seeking a balance and a positive synergy between the bodies.

Marine shrimps, oysters, crabs and fish grow in the same environment, creating a natural ecosystem that enhances and protects biodiversity. Natural resources are preserved in a sustainable way to reduce the environmental impact. PRIMAR performs constant monitoring of water quality, ensuring the microbiological safety of their products.

Organic shrimp farming already takes place in a low thickening system, where they can swim to freedom, which endows them with a more rigid meat texture. The bottom of the nurseries gains a biological coverage formed by algae and microcrustaceans, which serve as food for the farming. Due to natural food, the taste is quite different from conventional farming shrimp and very close to the taste of sea shrimp.

The organic oyster farming happens in the same nursery in Cameroon, where different species benefit from natural food chain.

To develop, maintain and expand the production system to Excel there are several partners, such as the Mokichi Okada Foundation, the Department of Oceanography and Limnology from UFRN, the Undergraduate Department of the school of Agronomy in Mossoró, the Biodynamic Institute (IBD) North Fishing S/A, and the Conatura and the Eng & water Ltda. These institutions are important for Excel, not only for contributing with the best technical quality of the production system, but also for exercising a decisive role in the legitimacy of the company's activities.

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# **EVENTS** (PAGE UNDERCONSTRUCTION)

#### **IN EUROPE**



**OWC** 

#### IN LATIN AMERICA



II PAN-AMARICAN MEETING ON AGROECOLOGICAL MANAGEMENT OF PASTURES 07-09/ APRIL Pelotas/RS/BRAZIL



BIOFACH BRAZIL 5-8 Jun 2014 São Paulo/BRAZIL



UNITED NATIONS CLIMATE CHANGE CONFERENCE December Lima/ PERU



BRAZILIAN SYMPOSIUM IN ORGANIC HUSBANDRY 07-10 AUGUST 2014 - During the 41th CONBRAVET Gramado/ RS/BRAZIL

PROMOTED BY IFOAM LEADERSHIP TRAINING COURSE IN AGROECOLOGY AND

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