



July 2010
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Agricultural Research (EMEPA). Many scientific activities will be offered as symposia, short courses, discussion forums, oral session to present selected papers as well as poster session. Moreover, will be technical visits, fashion shows and a gastronomic festival.

The program is designed for goat industry experts, farmers, technicians and undergraduate and graduate students. The best scientific studies presented at the event will be published in the Journal of the IGA, Small Ruminant Research, which has wide international circulation.

10th ICG, September 19-23, 2010: Technological development and associated attempts toward sustainable small ruminant production

Dear IGA members,

Researchers of international renown will meet in Mar Hotel Recife, Pernambuco, Brazil, from September 19-23, 2010 to discuss problems and solutions for the improvement of goats worldwide. This is the 10th International Conference on Goats (IGA 2010), whose central theme is:

Technological development and associative attempts to a sustainable small livestock production.

Several wonderful international speakers have been confirmed:

- Dr. Corrie Brown, a researcher at the University of Georgia (USA), who will talk about diseases of goats and their economic impacts.
- Dr. Robert Orskov, a researcher at the Macaulay Land Use Research Institute (UK) responsible for improving the evaluation methodology used for food today, will address the new challenges in the feeding of small ruminants for developing countries
- Dr. Maria Wurzinger, a researcher at the University of

Natural Resources and Applied Sciences, BOKU (Austria), discussing breeding strategies based on knowledge of small producers.

- Dr. Jean-Paul Dubeuf, IGA President, will speak about "Diversity and challenges for small goat production around the world.

Besides these names, the event will be attended by representatives of the International Fund for Agricultural Development (IFAD) (www.ifad.org) and the United Nations Food and Agriculture Organization (FAO) (www.fao.org).

The event of the 2010 IGA is the result of a partnership between the National Institute for Semiarid (INSA/MCT), Universidade Federal Rural de Pernambuco (UFRPE), Brazilian Enterprise for Agricultural Research (EMBRAPA/CNPC), Federal University of Paraíba (UFPB) and Company Paraibana

Only two years after Querétaro, we have more than 300 subscriptions, 350 papers received and a great participation of farmers and students.

As a member of this board and on behalf of the Executive Committee, I request your commitment to publicize our event.

Visit the conference website: www.iga2010.com.br.

Best regards,
Maria Norma Ribeiro
 Executive Committee and IGA Board Member

IGA 2010



Recife - Brazil

Sheep and Goats in Iran

Written by Farhad Mirzaei

Iranian sheep and goats have the world's sixth and fifth ranks for the quality of their meat and milk. Additionally, based on archeological findings dating back 6000 years, the hilly region of Sarab in Iran was the origin of the world's wool-sheep.

In a 2000 census, it was reported that sheep and goat populations reached to 54 and 27 million heads respectively

(Table I-5) accounting for a GDP equal to \$7.6 billion. This composes 400,000 tons of meat, 820,000 tons of milk, 60,000 tons of wool, 8400 tons of goat fuzz and hair, 22 million skins and 188,000 tons of guts.

At present, more than 1.6 million people are directly involved in sheep and goats breeding which plays a significant economic role in rural and nomadic livelihood. In fact, such flocks constitute an outstanding capital quite influential in their households. Averagely, 22.6% of sheep and goat populations are reared under nomadic and semi-nomadic systems and the remaining 77.4% are managed under composite (rural-farm) method. Every rural/nomad household keeps about 95 sheep and 65 goats. Traditional movement and shepherding are almost conventional

countrywide. Animal-keepers are used to displace their flocks between the provinces.

Generally, rams are integral parts of the rural herds, while in nomadic system; they only stay 1.5 to 6 months with the herd.



native stocks. Only a few percent of many identified breeds have undergone the National Breeding Plan (Ram performance test) which constitutes 2% of the total sheep and goat population. Nearly 65% of the available sheep are relatively pure whereas the remaining 35% are hybrid. Less than 14% of goats are genetically pure and 86% are categorized as either scrub or mixed or untitled.

In 1991, there existed 47.7 million sheep and lambs which increased to 54 million by 2001 (8.2% growth), comprising of 26 pure breed and their hybrids (Table I-5). This trend expresses an increase from 24.7 million sheep and lambs which increased to 54 million by 2001 (8.2% growth), comprising of 26 pure breed and their hybrids (Table I-5).

This trend expresses an increase from 24.7 million sheep and lambs which increased to 54 million by 2001 (8.2% growth) bearing 9 native breeds and their hybrids (enclosed maps numbers 6 and 7 indicate the sheep and goats distribution by regions in the country).

Most Iranian sheep and goat breeds primarily impressed and developed by natural selection and adaptation to environmental condition, followed by impacts from various breeders. These breeds are traditionally named upon their breeding tribes or geographical origin. To date, Iranian sheep or goats are not racially registered but claimed as

Many sheep breeds are multipurpose and used for meat, milk and wool production. Besides, three other pelt breeds exist in the country. More than 96.3% Iranian sheep are fat tail and the 4% semi-fat or tailed breeds. "Zel" is the sole tailed breed together with well-known semi-fat Taleshi and Dalagh (Atabai) breeds living in northern areas and Caspian shore (Table I-6). Different goat breeds are raised for their meat, milk and hairs. There are populous and famous breeds as "Raeini" and "Siahmouie", together with less populous ones as "Marghoz", "Najdi" and "Tali".

Traditional, nomadic and semi-nomadic are the major operation systems so far identified. Normally, nomads and rural communities are used to implicate traditional system.

Continued on page 3

Sheep and Goats in Iran (continued from page 2)

Semi-intensive systems represent predominantly fattening and breeding of sheep and goats in farms, whereby intensive system, sheep tend to be grown at agro-industries run by public holdings and large cooperatives. In nomadic and semi-nomadic breeding systems, various animal species i.e. horses, mules and sometimes camels are kept together with sheep and goats mainly for transportation purpose.

Moreover, the system composes of some poultry i.e. hens, cocks, geese, ducks and turkey, living with sheep and goats as the main flocks near the black tents. At the rural level, in addition to sheep and goats, cattle and poultry farming and in places, buffalo and camels are also conventional. In industrial and semi-industrial systems, raising any species (goats and sheep) is specially conducted for their meat. These systems practically enjoy rather productive and heavy breeds for raising intention (Table I-7).

In triple system, raising sheep and goat shall thoroughly comprise of locally adapted breeds. There exist some genetic disturbances at border strips, for instance Pakistani goats along the Iranian south-eastern border are very similar to Bitul and Tary breeds. Given the diversified climates, ranges,

traditional rearing systems, and socio-economic status of the animal-keepers, there are particular importance and opportunities for locally adapted breeds. Also worth noting are a few foreign breeds, e.g. Sanan goat, Merino sheep, and Suffolk were recently imported for research and training centers, came up with new hybrids which however were not fully developed for some reasons. Sheep and goat husbandries are

relatively less vulnerable to dryness, social issues, access to capital and labor force, but rather sensitive to diseases and exchange fluctuations. In semi-intensive and extensive systems either rural, nomadic or semi-nomadic, greatest impact originates from dryness, social changes and access to capital.

Presently, social changes and demand for more welfare may create serious threats to rural and nomadic rearing systems, and if not appropriately addressed, the production shall experience a drastic loss. In view to remarkable population rise at the rural level, scarcity of the resources, socio-economic problems, and basic changes in



predominantly run by private ownership. Cooperative units constitute smaller portions and minor industrial sheep-breeding farms enjoy public ownership.

Generally, sheep and goat herds include 100 to 150 productive animals and albeit, other quantities are more or less traced. Nowadays, sheep breeding systems is mostly self-sufficient followed by negligible imported drugs for veterinary purposes. So, any fluctuations in imported medicines, cannot affect them significantly. Flocks reared in industrial systems are

consumption patterns, there expects a fundamental inclination of traditional and subsistent sheep and goat production towards intensive and semi-intensive systems. This scenario entails a rapid switch-over to adapted breeds upon indigenous stocks which may lead to elimination of some low-yield breeds from production cycle. Therefore, significant tasks have to be foreseen for sustainable development and genetic resources protection, relying on the state of the art technology and know-how

Continued on page 4

Sheep and Goats in Iran (continued from page 3)

through grasping workable goats at national scale. mechanisms for action.

In a preferred order, meat, milk, wool, quail, skin, hair, mohair, edible and inedible additives form the most important sheep and goats products. To date, economy of scale assumes as the highest feature in sheep breeding operation (Table I-8). Meat production deserves the first priority in all regions, but sometimes, its position could be occupied by milk and fibers. Noteworthy that there is no significant role played by exotic animals in sheep and goat breeding in Iran. Meat and milk are totally consumed in domestic markets, and the sheep wool is employed in carpet weaving industry but the quails are exported to foreign markets.

Goat hairs are partially exported while its mohair used for knitting traditional cloths. Sheep skins are greatly exported as pickles, whereas goat skins used as leather for local purposes. All guts have domestic consumption but intestines are exported after treatment.

Manures are normally applied as fertilizers or sometimes as fuel by rural households.

Over the past decades, no significant change was experienced in relative production shares of sheep or

Hopefully, introduction of enabling systems in future, may lead to deserve higher shares for the afore-mentioned outputs. Unless a reliable condition created for optimum utilization of native genetic resources, all the foregoing yields and in particular, the animal protein provision would expose serious risks in future.

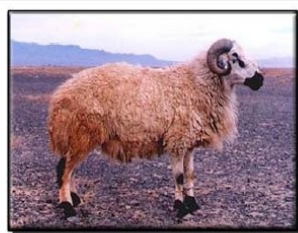
In the last decade, traditional pastorals were decreasing mainly owing to socio-economic impacts and government policies. For instance, reduce the pastures and range area, destruction of pastures, pasture and livestock equilibrium plan, withdrawal of livestock from forest and range areas, tendency to migration, urbanization, and

Therefore, due to prevailing climatic, socio-economic and environmental conditions plus government consideration, there are promising chances for development of semi-industrial system compared to traditional and industrial ones.

It is expected to compensate the missing shares by implicating suitable change in semi-industrial mode which however, entails serious considerations by policy-makers and professionals at the national level. Over the past decades, outstanding diversification was enforced in milk and dairy products mainly by importing the state of the art of technology in processing and packaging fields. Meat and skin also enjoyed diversified outcomes.

In general, tangible progressions are now realized in recording techniques, genetic breeding, technical supports and processing industries (slaughter-houses, dairy plants, etc). Such steps have either supported producer and production, or improved quality and quantity of the products, which rationalizes further inputs for an integrated patronage.

[To see all four Tables, visit our website or click here.](#)



A Network Proposal on Goat Carcass Quality and Meat Evaluation

Written by Alfredo Teixeira, IGA Country Representative, Portugal

A recent development to improve the prediction of body or carcass composition in small ruminants using ultrasound technology (RTU) has been made (Silva, et al., 2006; Hopkins et al., 2007 and Teixeira et al., 2006 and 2008).

Particularly in goats (2008) provides suitable models to estimate muscle and goat fat depots. With the perspective to use a unique model to estimate body composition, based on a reduced number of predictors (Peres et al., 2010) using the database from the experimental conducted by Delfa (2004) and published by Teixeira et al. (2008) proposed the simultaneous using a multiple partial least squares (PLS) or

artificial neural networks (ANN) to built a model to predict simultaneous several goat fat depots. So, the use of rapid and accurate methodologies to predict body or carcass composition of live animals and to assess objectively the carcass quality has been and still is a great challenge.

For producers as well for retailers, processors and consumers the knowledge of tissue composition and distribution, the partitioning of fat and muscle units has become more and more important. In our understanding, electronic technology such as RTU together with ANN may improve the precision of predictions and contribute to implement objective methods that are able to assess body or carcass composition allowing the monitoring of an on-

line evaluation system of goat carcass and meat quality.

In this sense the main objective of the present work will be to demonstrate the necessity to organize a world network to build a database, covering the most relevant carcass and body compositions data, for the most important goat breeds at different maturity degrees and with carcasses that proportionate the development of general, robust, and more reliable models to swiftly assess goat and carcass body compositions, as well as to implement a modern and objective on-line technique for carcass evaluation and marketing classification.

For more information email: teixeira@ipb.pt

Book: *Goat Science and Production*

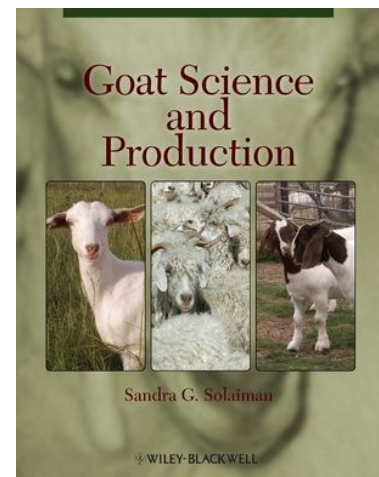
Goat Science and Production is the first text in several decades to present comprehensive, state of the art information on goat science and production practices from an international perspective. Including information on meat, dairy, and fiber goats, chapters are organized logically to facilitate fundamental understanding of goat anatomy and physiology as well as practical production applications.

Goat Science and Production begins with an overview of current global production, giving the reader necessary context to enhance subsequent chapters on breed variety, genetics, animal evaluation, and functional anatomy and physiology. Later chapters expand on these concepts highlighting practical application affecting feeding practices, health and

disease management, and housing requirements. Information on milk, meat, and fiber production is also addressed, along with a key chapter on formulating a business plan and marketing strategy. The book concludes with a thorough discussion on further needs in research and education providing direction for future progress.

Goat Science and Production is globally contributed and provides an essential introduction and reference for students, researchers, outreach personnel, and producers world-wide.

The cost of *Goat Science and Production* is **\$124.99 USD**. ISBN: 978-0-8138-0936-6 Hardcover, 444 pages March 2010, Wiley-Blackwell



Sandra G. Solaiman, PhD, Professional Animal Scientist, is Professor of Animal and Poultry Sciences and Director of the Small Ruminant Research and Education Program at Tuskegee University, AL. She is also an Adjunct Professor at Mississippi State University, MS, and Auburn University, AL.

[To find this book online, click here.](#)

Reunião Nacional de Caprinicultura

28, 29 e 30
Outubro
2010

Centro Cultural Municipal de Mirandela
Auditório Principal



CAPRA 2010 — 2nd National meeting on goats in Portugal

The IGA country representative for Portugal, Alfredo Texeira, in association with National Serrana Goat Breeders Association (ANCRAS), the Agriculture School (ESA) of the Bragança Polytechnic Institute (IPB) and the Mountain Research Centre (CIMO), are going to organize *The Second Portuguese Goat Production Meeting*.

The meeting will take place in Mirandela (Portugal) from October 28-30, 2010.

The main subject areas covered Meat and Milk production, Animal Breeding and Genetics, Nutrition, Biology of Goat Production Systems, Behaviour, Welfare and Health. Round tables, paper sessions presentations, discussion and technical visits to goat farmers

Accomodation

The conference secretariat will not be responsible for booking accommodation

Participants are invited to book accommodation directly with the hotels.

Hotel addresses from Mirandela, see at:

<http://esa.ipb.pt/capra2010/index.php/alojamento>

Further Information

For all additional information, please contact: capra@ipb.pt

Call for papers

All authors wishing to present papers at the meeting are requested to submit the papers before September 30th.

Authors should indicate the type of presentation (oral or as a poster).

Papers with a maximum of 5 pages, should be written according the Word file template provided on the conference's website: esa.ipb.pt/capra2010 or the [English language website](#).

Registration Fees

The Registration fee of 100 € includes: attendance to all sessions; conference documentation, proceedings, coffee breaks, lunches (3 days) and meeting dinner (Friday).

Summary: Valorisation of the traditional “Darfiyeh” goat cheese as a contribution to the development of the Northern Lebanon mountain

“Darfiyeh”, a cheese traditionally made in northern Lebanon, is a highly appreciated goat cheese with an exceptional taste and a typical manufacturing procedure. Produced from raw milk, in mountain regions, where breeding is still practiced, this product is a special cheese prepared by the farmers themselves. The cheese making process requires the use of goatskin known as “Dariff”, salted and well

cleaned, as a container for the ripening process.

Due to the seasonal milk production, the finished products can only be present periodically in the market. “Darfiyeh” cheese has a long conservation period which allows it to be available during the whole year. For this reason, all Lebanese farmers show their interest in this kind of cheese production, even if it does not have

a great presence on the market.

Experiments on “Darfiyeh” are carried out in the dairy plant of the Agricultural Center of the North-René Moawad Foundation, in order to obtain the original cheese with an improved quality. This encourages the consumption of a traditional cheese and improves the farmer's social situation.

Book: *Medicine and Surgery of Camelids*

Medicine and Surgery of Camelids is and veterinary students.

the classic comprehensive reference on llamas, alpacas, vicunas, guanacos, and camels.

With information on topics ranging from nutrition and management to infectious diseases and emergency care, this book provides information on the health and maintenance of these species. Updates to the Third Edition include new information on camels; full color throughout; significant revisions to the parentage verification, infectious diseases, anesthesia, restraint, and nutrition sections; and additional information on the alpaca genome. This is an essential resource for practicing veterinarians, zoo veterinarians,

and veterinary students. Key Features:

- The classic comprehensive reference on llamas, alpacas, vicunas, guanacos, and camels.
- Includes expanded information on camels; significant updates to the parentage verification, infectious diseases, anesthesia, restraint, and nutrition sections; and additional information on the alpaca genome.

Key Features:

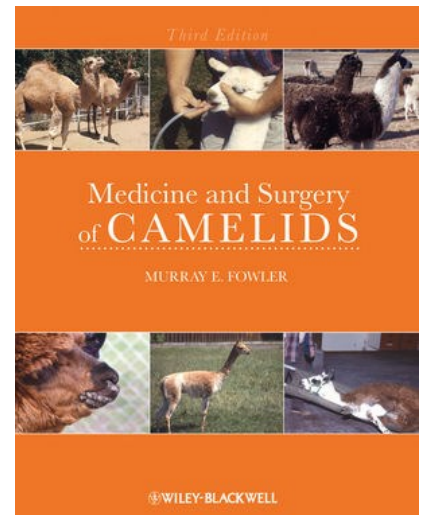
- The classic comprehensive reference on llamas, alpacas, vicunas, guanacos, and camels.
- Includes expanded information on camels; significant updates to the parentage verification, infectious diseases, anesthesia, restraint, and nutrition sections; and additional information on the alpaca genome.

The cost of *Medicine and Surgery of Camelids* is **\$149.99 USD**.

ISBN: 978-0-8138-0616-7

Hardcover, 636 pages

August 2010, Wiley-Blackwell



Murray E. Fowler, DVM, is Professor Emeritus of Zoological Medicine at the School of Veterinary Medicine, University of California - Davis.

[To find this book online, click here.](#)

Summary: Goats in arid areas and under harsh conditions

A communication during the IGA regional conference in Fuerteventura, April 2003

Animal Production Science has Morocco, Egypt, Spain, Argentina and Peru have confirmed the advantage of goats under arid diversity of situations.

conditions, but in spite of local cases of success, goat production systems are often limited by low productivity, limited forage resources and low training level of breeders. Examples of these systems in Cyprus, Tunisia, local participatory) are developed.

For each project a previous analysis of its specific advantages and limits for goats is recommended. Research action and participatory or co-operative methods are recommended for a better impact and success of rural development of dry zones and reduce the climatic uncertainty.

Announcement: 9th ICG Plenary Papers published in SRR

Dear Readers,

The plenary papers of the 9th International Conference on Goats have been published in a special

issue of Small Ruminant Research: April, Volume 89, Issues 2-3, Pages 63-244. This issue was edited by Jorge R. Kawas, IGA Board Member.

All IGA members have access to this publication through their SRR online subscription. If you are not an IGA member you can preview some of the papers on the Elsevier website, [click here](#). [Click here or visit our website to download the proceedings.](#)

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