

IGA Newsletter
December 2019

### Inside this issue:

- Remembering Dr. James DeVries
- A Tribute to Dr. Juan Capote for His Retirement
- <u>Important Goat Rearing Questionnaire</u>
- <u>Book Announcement Goat</u> Science
- The status of Markhoz goat rearing in Kurdistan province
- Informe del XI Congreso
  ALEPRyCS y 1er IGA Latinoamericano

- Preparación de productos caprinos, Colombia
- Goats products preparation, Colombia
- <u>Dairy Sheep and Goat Conference</u>
   ence 2020 (United Kingdom)
- Announcement 3rd edition of the Indigenous Goat Production Handbook
- The Current Situation of Goat Breeding in Romania
- The status of Abadeh Cashmere goat rearing in Fars province

- Dr. Christopher Lu's Remarks at the Closing Ceremony of ARCG Nepal 2019
- Congratulations to the Organizing Committee of ARCG 2019
- <u>Second Meeting of the PPR-GREN, Kenya</u>
- Announcement 5th Asian-Australasian Dairy Goat Conference (AADGC) 2020, August 20-22, Thailand
- SMARTER meeting, Edinburgh, Scotland, November 26-27, 2019

### Remembering Dr. James DeVries

It has been almost six months since Jim passed away on April 7, 2019. I think of him as a good friend and close colleague. Many of us remember Jim as a collegial team member at the International Goat Association, but few knew that he was instrumental in every major decision I made as the President of IGA.

Jim was very much respected and trusted, and I often took his advice and went against my own instinct and wishes. He served as Secretary-Treasurer for IGA under more than one president. Jim was particularly supportive when we tried to rebuild IGA's financial standing. He was an important partner when we embarked the strategic planning process, for the first time in the history of IGA. With the participation of Christie, Rosalee, a facilitator, among others, Jim worked tirelessly to make sure the logistic was well in place.

When Heifer International moved to its current offices, Jim assisted in organizing



a Board of Director's meeting in Little Rock, Arkansas. Everyone who attended would agree it was one of the most rewarding meetings we had, not only moving IGA forward with many important decisions but also the hospitality extended by Jim, his family, and Heifer International. Many of us would agree that Jim contributed to IGA significantly and provided very much needed stability and continuity.

Jim had an outstanding career with Heifer International. He served for many years as Director of Africa/Near East Program and Director of International Programs before retired as Senior Vice President in charge of heifer's global programs spanning more than 35 countries. I personally witnessed Jim's tremendous enthusiasm and passion for local producers, and I admired his skill and field experience. He

Continued on Page 2

### A Tribute to Dr. Juan Capote for His Retirement

After an outstanding life-long career with Canarian Agricultural Research Institute (Instituto Canario de Investigaciones Agrarias), Dr. Juan Capote has decided to retire after serving many years as its Director of Animal, Pasture, and Forage Production Unit.

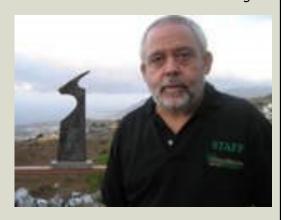
A native of Santa Cruz de La Palma in Canary Islands, Dr. Capote's academic credentials include a Diploma in Health from Real Academia de Medicina, a BSc in Biology from Universidad de La Laguna, a BSc in Veterinary Studies from UCM - Madrid, and a Ph.D. from University of Las Palmas de Gran Canaria. Dr. Capote contributed significantly to the advancement of the scientific knowledge with 217 publications including books, chapters, scientific and technical articles. He also had 180

presentations at various national and international conferences

Many of us who had the privilege to work with Juan over the years will agree that he is a humble and kind-hearted fellow human being, but at times can be humorous and hilarious. We all felt at ease when he was around. His sincerity and compassion often permeated through the atmosphere of gathering. He is known as a thoughtful team player and would not hesitate to lend a hand when it is needed.

Dr. Capote was instrumental in the success of 11th International Conference on Goats held at Gran Canaria, Spain in 2012. Juan was elected to be the President of International Goat Association from 2012 to 2016, after serving many

years as Country Representative of Spain, Regional Director of Europe, Director of the Board and Vice President. After his presidency, he continues to serve as the chair of Country Representatives & Regional Directors Management Committee Continued on Page 2



### Remembering Dr. James DeVries (Continued from Page 1)

was very much into local goat activities and asked relevant questions to make sure that local Heifer employees were in touch of reality and understood the aspiration and needs of producers whom they tried to assist. Many of us are committed to the alleviation of poverty and the improvement of lives in rural community through goat production. Jim was the model example as he had changed many people's lives through his endeavor and outreach.

James was a devoted Christian and a long-time member of St. Andrew's Church. He was a devoted husband, father, and grandfather and loved his family deeply. The months after James lost his beloved wife Judy, James wrote in his Christmas letter: "While I miss Judy each day, the love of family and friends has not only sustained me but also allowed me to move forward. I love the song by Matt Maher, Your grace is enough. Among the lyrics are the words: God, I see your grace is enough; I'm cov-

ered in your love; Your grace is enough for me. For me this grace is not something abstract." This inner strength from above helps to explain the love, care and devotion Jim demonstrated throughout his life. Started as a teenager immigrant on a boat to the land of promise, Jim transformed lives of many. It is an understatement to say that he will be missed.

Christopher D. Lu IGA President 2004-2008

#### A Tribute to Dr. Juan Capote for His Retirement (Continued from Page 1)

that is responsible for reviewing nominations, maintaining communication and reporting, and encouraging engagement in IGA activities and assists RDs and CRs with organizing IGA meetings, and developing IGA cosponsorship of goat related events to raise IGA's profile, one of the most consequential committees at IGA.

Dr. Capote is an individual with tremendous humbleness. On one occasion, I mentioned to Juan that I first met him at a Board of Director's meeting in Paris, France. At that time, he was introduced to the Board as an active Country Representative of Spain with great enthusiasm. However, he quickly corrected me by saying that we first met in Coquimbo, Chile in 1991 at the Simposio In-

ternacional De Explortacion Caprinas En Zonas Aridads (International Symposium on Goat Production in Arid Zones). As humble as he always had been, he said: "you were a famous speaker then, and I was just a nominal audience." He helped to realize that I had met this great individual for over a quarter of century.

Dr. Capote is a person with sincerity. We met again at the Chinese Sheep and Goat Society Meeting in Shijiazhuang in 2016. He just co-authored and published a book entitled "A Genetic Perspective about the Origin of the Canarian livestock" and was kind enough to present me with a copy. With enthusiasm for an autograph from a rock star, I asked him if he would sign his name on the book. He

blushed, and he never did. Dr. Capote also authored a chapter in an FAO publication entitled "Sustainable Goat Breeding and Goat Farming in Central and Eastern European countries" in the same year, but he did not mention it.

With great appreciation and on behalf of many colleagues who got to know Juan and worked with him directly or indirectly, a big "Thank You" to you for your outstanding contribution to the advancement of knowledge in goat production and for your distinguished service to IGA and many other organizations around the world.

Christopher D. Lu IGA President 2004-2008

### Important - Goat Rearing Questionnaire

My name is Holly Vickery, and I am a PhD student at the University of Reading, United Kingdom.

There is currently very little information on management systems for goats worldwide, and even less which focuses explicitly on the husbandry of kids that are reared artificially (away from their mothers).

My research is looking at how we can improve the welfare and productivity of artificially reared goat kids with a focus on milk feeding and weaning methods.

It is important to me that my research can be used to inform practice on-farm and is therefore essential that results are feasible for farmers to implement. This questionnaire aims to understand what practices are currently used on-farm and identify areas in which changes could be made.

There is no geographical limit on this

survey, so wherever you are - if you're artificially rearing goat kids, you are able to participate!

The survey should only take about 10 minutes of your time to complete. Please participate in my survey if you're able to <a href="https://reading.onlinesurveys.ac.uk/guestionnaire-to-identify-methods-used-to-artificially-rea">https://reading.onlinesurveys.ac.uk/guestionnaire-to-identify-methods-used-to-artificially-rea</a>

Thank you, Holly Vickery

#### **Book Announcement – Goat Science**

Edited by Sándor Kukovics Széchenyi István University of Sciences

Goat science covers quite a wide range and varieties of topics, from genetics and breeding, via nutrition, production systems, reproduction, milk and meat production, animal health and parasitism, etc., up to the effects of goat products on human health. In this book, several parts of them are presented within 18 different chapters. Molecular genetics and genetic improvement of goats are the new approaches of goat development. Several factors affect the passage rate of digesta in goats, but for diet properties, goats are similar to other ruminants. Iodine deficiency in goats could be dangerous. Assisted reproduction techniques have similar importance in goats like in other ruminants. Milk and meat production traits of goats are almost equally important and have significant positive impacts on human health. Many factors affect the health of goats, heat stress being of increasing importance. Production systems could modify all of the abovementioned characteristics of goats.

You can download each chapter at IntechOpen, <a href="https://www.intechopen.com/books/goat-science">https://www.intechopen.com/books/goat-science</a>.

#### Chapters

Open access peer-reviewed

1. Molecular Genetics and Genome Biology of Goats

By Kingsley Ekwemalor, Sarah Adjei-Fremah, Emmanuel Asiamah and Mulumebet Worku

Open access peer-reviewed

2. The Development and Genetic Improvement of South African Goats
By Carina Visser and Este van Marle-Köster

Open access peer-reviewed

3. Rate of Passage of Digesta in Ruminants; Are Goats Different?
By Mehluli Moyo and Ignatius V.

Nsahlai

Open access peer-reviewed

4. lodine Deficiency in Goats
By Rajinder Kumar Bhardwaj

Open access peer-reviewed

5. Reproduction in Goats
By Fernando Sánchez Dávila,
Alejandro Sergio del Bosque González
and Hugo Bernal Barragán

Open access peer-reviewed

6. Recent Advances in Research on the Hormone INSL3 in Male Goats
By Tetsuya Kohsaka, Siqin, Itaru Minagawa and Hiroshi Sasada

Open access peer-reviewed

7. <u>Estrus Synchronization and Artificial Insemination in Goats</u>

By Bobwealth Oakina Omontese

Open access peer-reviewed

8. Proteomic Analysis of Goat Milk
By Zohra Olumee-Shabon and Jamie L.
Boehmer

Open access peer-reviewed

9. Development of an In Vitro Goat Mammary Gland Model: Establishment, Characterization, and Applications of Primary Goat Mammary Cell Cultures

By Jernej Ogorevc, Minja Zorc and Peter Dovč

Open access peer-reviewed

10. Nutritional and Health Profile of Goat Products: Focus on Health Benefits of Goat Milk

By Maria João Reis Lima, Edite Teixeira-Lemos, Jorge Oliveira, Luís P. Teixeira-Lemos, António M.C. Monteiro and José M. Costa

Open access peer-reviewed

11. <u>Bioactive Compounds in Goat</u>
<u>Milk and Cheese: The Role of Feeding System and Breed</u>

By Salvatore Claps, Roberta Rossi, Adriana Di Trana, Maria Antonietta di Napoli, Daniela Giorgio and Lucia Sepe

Open access peer-reviewed

**12.** Carcass and Meat Quality in Goat By Ana Guerrero, María del Mar Campo, José Luis Olleta and Carlos Sañudo

Open access peer-reviewed

13. Parasitism in Goats: Husbandry Management, Range Management, Gut Immunity and Therapeutics
By Muhammad Mazhar Ayaz, Muhammad Mudaseer Nazir, Noreen Samad, Muhammad Zubair, Muhammad Hanif, Mubashir Aziz, Ahsan Sattar Sheikh,

Atif Akbar, Abdul Waheed, Agal Za-

Open access peer-reviewed

man and Nasir Mahmood

14. Complementary Medicine with High Dilutions Strengthen Conventional Therapies and Health

By Silvio Leite Monteiro da Silva

Open access peer-reviewed

15. <u>Characterisation of Goats' Response to Heat Stress: Tools to Improve Heat Tolerance</u>

By Juan M. Serradilla, María J. Carabaño, Manuel Ramón, Antonio Molina, Clara Diaz and Alberto Menéndez-Buxadera

Open access peer-reviewed

16. Goat System Productions: Advantages and Disadvantages to the Animal, Environment and Farmer
By António Monteiro, José Manuel Costa and Maria João Lima

Open access peer-reviewed

17. Goat Farming and Breeding in Jordan

By Ja'far Mansur Khalaf Al-Khaza'leh

Open access peer-reviewed

18. The Goat Dairy Sector in Lebanon

By Mireille Serhan and Jessy Mattar

Special thanks to Sándor Kukovics for bringing this information to our attention.

Remember, the 13th International Conference on Goats will be held in Hungary, September 14-17, 2020

Visit the conference website to learn more, <a href="http://www.icg2020.org/">http://www.icg2020.org/</a>

### The status of Markhoz goat rearing in Kurdistan province

Written by H.R. Bahmani, N. Papi, F. Mirzaei

Animal Science Research Institute of Iran, Karaj, Iran

## History of goat breeding in the province

The archaeological excavations show that Aryans were the first to domesticate goats for the first time. They were domesticated more than 9000 BC in Asia and the Middle East, especially in the lands now called Kurdistan. Given the many similarities in terms of coverage and characteristics of the produced fiber between Markhoz goats and Angora goats, they have been known as Iranian Angora goats and their fiber as mohair in some references. Some researchers assume the center of Anatolia and many have speculated Asia Minor as the origin place of Angora goats, especially where Kurds live in Iran, Irag, and Turkey. The variation in the goats in Kurdish areas supports the latter speculation. Markhoz goat population may have been part of the core Angora goats isolated from its population in Iraq and Turkey for long years.

#### Geographic distribution areas

Markhoz goats have dispersed for years away in the provinces of Kurdistan, West Azerbaijan, and Kermanshah. At present, there are only few of them in a small part of Kurdistan and West Azerbaijan provinces. More than 90 percent of the population of Markhoz goats are scattered in its natural habitat, in the county of Armarda in the vicinity of the city of Baneh.

#### **Population**

According to the statistics offered by Jihad-e Sazandegi (Construction Jihad) Organization in 1996, the population of this breed accounted for 22,000 and 15,387 in the three provinces and Baneh, respectively. Based on the report prepared by the experts in the field of domesticated animal breeding, the population of Markhoz goats was 5,000 in Baneh in 2005, and since then the downward trend has

continued. Its population has decreased sharply in the recent years; 1,669 and 804 goats were counted in Baneh in 2013 and 2016, respectively. Considering the number of goats kept in research stations in Saghez and Sanandaj, the number of goats in Iran is 1,400 heads.

The types of rearing systems In its traditional breeding system of Markhoz goats in their primary habitat, one or more households form a unit called Kokh. They graze the goats alone or in combination with many hair goats and sheep in a distinct area of woodland pasture of the region. Breeding Markhoz goats in Kokhs and villages in Baneh is very similar to the breeding of goats and sheep in most parts of the Zagros Mountains. At the beginning of the growing season of range plants from the mid to late April, grazing at pastures begins. Fresh leaves from oak trees are harvested during the summer and early fall for the consumption of grazing goat flocks. From August to September, leaves are cut in an intermittent period of 2 to 3 years and stashed, locally known as Taya, on the same trees. With the weakening of pastures during the late fall and over the winter, the collected or purchased oak leaves are the primary sources of feeding for goats. Industrial farming

of these goats has not been done.

#### Job creation

On account of the decline in Markhoz goat population in recent years, the number of farmers has decreased, and only 30 households are directly engaged in Markhoz breeding to make a living. Also, about 40 people are indirectly engaged in spinning to produce traditional clothing.

Cultural, social and economic relation with nomadic and rural communities Markhoz goats are regarded as triplepurpose livestock for their meat, milk, and fiber (mohair). In terms of meat quality, their meat is crispy, low -fat and tasteful. It has many fans in the region of Baneh and is preferred to the meat of other livestock and even hair goats. The residents of the area are to some extent self-sufficient due to supply of meat, milk, and clothing manufactured from their fibers. The declining population has had a significant harmful effect on people's lives and has destroyed the available customary system. The decline in the number of Markhoz goats as the main element of the system has affected other system components, especially the forest and pasture and has put them in danger.

Continued on Page 5

Table 1. Body dimensions of Markhoz goat (cm)

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Gender	Body length	Withers height	Chest round
Adult male	47.7	57.3	83.35
Adult female	45.2	53.7	77.6

Table 2. Annual production of Markhoz goat (Kg)

Lactation period (Day)	Milk	Wool	Hair	Carcass
180	90	33 <del>.5</del> 3	1	18.2

Table 3. Reproductive characteristics of Markhoz goat

Maturity age	Mating age	Parturition interval	Fertility	Twinning
(months)	(Months)	(Months)	(%)	(%)
15	18	12	93	20

Table 4. Economic traits of Markhoz goat

Gender		Live	e weight (Kg)	
	Birth	Weaning	6 Months	Mature
Male	2.7	15.5	17.3	40.3
Female	2.5	13.6	15.3	35.9

### The status of Markhoz goat rearing in Kurdistan province (Continued from Page 4)



#### Appearance features

Markhoz goats vary in color: white, different spectra of brown, grey and black. They are agile and clever with compact and relatively small body. Their head size is average with prominent eye sockets, thin snout, and relatively long and hanging ears. Their face has no coating fiber with except for a small portion of the forehead. Horns are thick and torsional in a male goat, while they are slim in female goats. Their short neck, legs, belly, and their whole body is covered with fiber, the chest is shallow, back is almost straight, and legs are short and narrow.

#### **Export**

The fibers obtained from this goat are invaluable and unique. With the increase in production to provide the local markets, it can also be exported as a non-oil commodity to earn foreign exchange.

#### Items use of products

Markhoz goats are regarded as triplepurpose livestock for their meat, milk, and fiber (mohair). In terms of meat quality, their meat is crispy, low-fat and tasteful. It has many fans in the region of Baneh and is preferred to the meat of other livestock and even hair goats. Milk and dairy products made from it play a crucial role in feeding families and breeders usually do not sell them. The fiber is used in making clothes and various products

(Fabrics, scarves, hats, socks, etc.).
The fibers are often spun into strips in traditional workshops, which have decreased in number in recent years.
Finally, they are woven into expensive men's costumes.

scheme in the habitat increases population so that the inbreeding and ge-

## Measures for identifying and genetic improvement

The Directorate for Animal Husbandry in Kurdistan Province purchased a large number of Markhoz goats to protect them in 1989, also carry out research projects and distribute several goats in the region annually. A station was launched in Sagez in 1995 to provide appropriate conditions for the conservation of this breed and to conduct research projects. Since then, lots of projects have been prepared and implemented in order to identify, improve the production and reproduction performance and conserve of this breed. The goats with brown coat are more popular as there is no need for dveing.

## Suggestions for ways to improve performance

The results of simulation experiments

meat quality, their meat is crispy, low show that in addition to improving the fat and tasteful. It has many fans in the region of Baneh and is preferred to the meat of other livestock and show that in addition to improving the management and control of adverse events, the genetic management of flocks in the form of a conservation



lation so that the inbreeding and genetic drift are well controlled. Given the state of Markhoz goat in its primary habitat, keeping a goat flock in the station guarantees the conservation of the race. The possibility of proliferation and distribution in the region increases and it provides support for the research and conservation programs in its primary habitat. A conservation program sponsored by the government is a short and medium-term solution for the transition from a critical period facing a race. The best way for this breed to survive is increasing its profitability so that there will be no need for further financial assistance. The profitability of Markhoz goats is feasible through genetic improvement and the development of manufacturing sector (product extension and development).

Thank you Farhad Mirzaei (IGA-CR Iran) for sharing this report with us.

### Informe del XI Congreso ALEPRyCS y 1er IGA Latinoamericano

Presenta: MVZ.MC.Dr. Héctor Mario Andrade Montemayor

Presidente de ALEPRyCS y Director Para de Mayo al 3 de Junio)
México, Centro América y el Caribe de la IGA 5 talleres de capacitación

El presente informe técnico del XI Congreso
de la ALEPRYCS y 1er IGA Latinoamérica, con
la finalidad de apoyar en el desarrollo de
capacidades técnicas en el área de pequeños
rumiantes, tanto al personal técnico, estudiantes, profesionistas y académicos.

Tours Técnicos
Muestra Ganadera

Descargue el info
aquí.

Este congreso se conformó de 4 partes: (31 de Mayo al 3 de Junio)
5 talleres de capacitación
Congreso científico
Tours Técnicos
Muestra Ganadera

<u>Descargue el informe completo, haga clic</u> aquí.



### Preparación de productos caprinos, Colombia

Estos videos muestran la preparación tradicional de productos de cabra por la etnia Wayuu de La Guajira en Colombia.

Un agradecimiento especial a Clara Viviana Rúa Bustamante (IGA-CR Colombia) por llamarnos la atención sobre estos videos.



Cecina - Preparación tradicional de la carne ovino y caprina



Dulce de leche - Preparación tradicional

### Goats products preparation, Colombia

These videos show the traditional preparation of goat products by the ethnic Wayuu from La Guajira in Colombia. They are in Spanish.

Special thanks to Clara Viviana Rúa Bustamante (IGA-CR Colombia) for bringing these videos to our attention.



Dried meat - Traditional preparation of goat and sheep meat



Dulce de leche (Caramel) - Traditional preparation

### Dairy Sheep and Goat Conference 2020 (United Kingdom)

The Annual Dairy Sheep and Goat Con- Dairy Goat farmers and their vets, ference has world class lectures on aspects of Dairy Sheep and Dairy Goat production and medicine, aimed at all small ruminant farmers, vets, advisors, nutritionists and suppliers. A combination of quality science and practical information given to an audience of farmers and vets.

The Conference aims to develop the partnership between Dairy Sheep and advisors and nutritionists - learning together to develop this partnership.

The Conference provides a forum for all interested in Dairy Sheep and Dairy Goat production to get together to learn and discuss current issues in the field.

Venue: St Pierre Marriott Hotel, Chepstow, NP16 6YA United Kingdom

For more information, visit their website <a href="https://dairysheepandgoat.com/">https://dairysheepandgoat.com/</a> events-and-conference/dairy-sheepgoat-conference-2020/.

DSGC2020

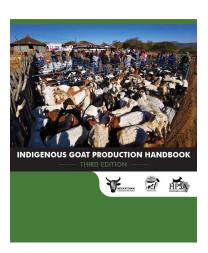
### Announcement - 3rd edition of the Indigenous Goat Production Handbook

The 3rd edition of the Indigenous Goat Production Handbook is available. This book aims to assist owners of indigenous goats with semi-intensive and extensive farming systems. It looks at ways to improve the productivity of their herds and start commercializing. This edition contains an expanded section on internal parasites, specifically worms, innovations that have been carried out with farmers in South Africa such as goat dips and kid enclosures, and the results of lessons learned since the last edition.

The book is part of an ongoing collaboration of the KwaZulu Natal Goat Agribusiness Project with HPSA, Mdukatshani, and the South African government and vets.

For more information on the project visit www.gapkzn.co.za. Or contact Marisia Geraci, marisia@hpsa.org.za.

Special thanks to Marisia Geraci, IGA Country Representative for South Af-



### The Current Situation of Goat Breeding in Romania

Written by Prof. Stela Zamfirescu, IGA Country Representative for Romania

Founder and Honorary President of ANCC CAPRIROM

The favorable conditions for the breeding of small ruminants in Romania determined the continuous development of these species. Goats continue their numerical development, as the leading milk suppliers. This increase is determined, on the one hand, by the visible decrease in dairy cows, and on the other hand, by consumers' awareness of the benefits of milk and goat milk cheese.

At the beginning of 2019, the total number of goats exceeds 2 million, of which the total number of females was 1,715,000 heads, with an increase of 117,365 heads, which represents a weight of 7.3%, compared to 2017. A recent analysis of the National Agency for Animal Husbandry

mentions a new aspect regarding the breed structure of goats. The native breeds raised in Romania are the Carpathian and Banat White. However, due to the massive imports, over the last ten years, of specialized dairy breeds, namely Saanen, Alpine and Anglo-Nubian, the structure of these breeds has changed dramatically.

In 2018, we found the following breeds raised and exploited in our country: 34.6% Carpathians, 1.7% Banat White, 1.1% other breeds, and 62.6% hybrids. The average milk yields of the last two years, per goat head, was 240-300 liters, on a lactation period of 210-240 days. Milk production control is currently carried out on 190,000 goats by the CAPRI-ROM National Association of goat farmers.

The continuous numerical increase of goats in Romania is also due to the support provided by the Romanian

> government and EU funds. This year, under the combined zootechnical support scheme (SCZ sheep/goats), i.e. for animals registered in the Genealogical Register and under the Official Production Control, breeders receive from European money 17.7 Euro per animal head. Apart from this amount, the farmers will also benefit from the Transitional National Aid (ANZ), but for

this scheme, the budget and the related amount is established after the adoption of the national budget for 2020, from which this state subsidy, granted by the Government of Romania, will be paid. In addition to these aids, other programs provide financial support to breeders for the purchase of males originating from productively controlled farms and have certificates of origin.

The most critical problems, still unresolved, are the lack of networks for the collection of milk from farmers and the organized capitalization of goat cheese. These shortcomings determine that a small part of the milk and cheese production will be capitalized by the milk processing factories, and the rest will be obtained by their consumption and on the local markets. We hope for an improvement of the goat network to increase the consumption of goat milk and meat as well as processed products, in the interest of growing income for farmers and full consumer satisfaction.





### Are you an IGA member?

You can pay your membership online through the IGA Store

Now is a great time to join:

- IGA memberships are effective for 1 year from the date you join.
- All IGA memberships include online access to Small Rumi-

#### nant Research.

- Participate in IGA projects, such as the IGA Consulting Group.
- Access to the MEMBERS area of the IGA website, where you get exclusive information, access to IGA member documents, etc.
- Submit articles for publication in the IGA Newsletter.

- Opportunities for leadership and participation in IGA committees.
- IGA is the voice of goat researchers & producers at national & international levels.













### The status of Abadeh Cashmere goat rearing in Fars province, Iran

Written by Abdulhamid Karimi\*, Nader Papi\*\*, Farhad Mirzaei\*\*

- \* Animal Science Department, Fars Agricultural and Natural Resources Research and Education Center, AREEO, Shiraz, Iran
- \*\* Animal Science Research Institute of Iran, Agricultural Research Education and Extension Organization (AREEO), Tehran, Iran



## History of Abadeh Cashmere goat breeding in the province

The history of breeding Abadeh Cashmere goats is not well known. Livestock (sheep, goats) rearing is an essential job for people in Abadeh and Bavanat cities. They produce thousands of tons of meat, a wide variety of dairy products, as well as cashmere and goat hair every year.

### Geographic distribution areas

Abadeh Cashmere goat are distributed in Fars province in Abadeh and some parts Bavanat.

#### **Population**

According to the statistics offered by Jihad-e Agriculture, the population of this breed accounts for 140,000 in Abadeh and some parts of Bavanat cities.

#### The types of rearing systems

The largest population of the animals are reared in herds by the village system, as opposed to industrial livestock farming.

#### Job creation

According to the statistics offered by Jihad-e-Agriculture, approximately 1,000 households are directly engaged in livestock breeding and in this way. Additionally, more than 4,000 people are engaged in dairy products and handicrafts, such as different varieties of carpet.

Cultural, social and economical with nomadic and rural communities

Abadeh Cashmere goats have suitable production in terms of meat, milk, cashmere, and hair and have an essential role in people's income. Goat skins used to produce the water bottle or container (Mashk), oil containers, and containers for making Dough (yogurts drink).

#### Appearance features

Abadeh Cashmere goats vary in color. They are 60 percent black with the remaining in grey, crème, brown, red, or a mix of these colors from chest to tail (narrow line). These goats have shorter withers height than waist.

#### **Export**

These animals are a protein source for people, and like other goat ecotypes of Fars province, can be sold for substantial prices in foreign markets such as Persian Gulf states.

### Items use of products

The Abadeh Cash-

mere goat breeders produce different dairy products from milk, such as yogurt, butter, cheese, and Nagorno Qrvt that play a significant role in feeding families. Approximately five to six months of milk is used. Their meat as a valuable protein source used for consumption and to increase household income.



## Measures for identifying and genetic improvement

In 2000, agriculture experts of Jihade-Agriculture organization tried to identify Abadeh Cashmere goats according to their morphological characteristics, in addition to other goat's ecotypes in Fars province, and breeding programs have covered them.

## Suggested ways to improve performance

In terms of their production ability, to prevent mass extinction of these valuable genes, it is suggested to perform identifying projects of all production and reproductive traits in breeding programs for increasing their potential output.

Special thanks to Dr. Farhad Mirzaei, IGA Country Representative in Iran, for submitting this article.

Table 1. Body	dimensions of	Abadeh	Cashmere	goat	(cm)	
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Body length	Withers height	Chest round
43.7	66.5	73.1
38.3	59.8	65.5
	43.7	43.7 66.5

Table 3. Reproductive characteristics of Abadeh Cashmere goat

Maturity age	Mating age	Parturition	Fertility	Twinning
(months)	(Months)	interval (Months)	(%)	(%)
	18	12	97.2	1-2

Table 2. Annual production of Abadeh Cashmere goat (Kg)

actation period (Day)	Milk	Fibre	Hair	Carcass
.50	35	0.4	0.2	18.8

Table 4. Economic traits of Abadeh Cashmere goat

Gender	Live weight (Kg)			
	Birth	Weaning	6 Months	Mature
Male	3.5	16.0	25	48
Female	2.5	14.0	22	38

### Dr. Christopher Lu's Remarks at the Closing Ceremony of ARCG Nepal 2019

First, I would like to thank the host organization and the people of Nepal for your warm welcome and hospitality. You are genuinely lovely people, and I appreciate your sincerity and friendship. Congratulations go to the Faculty of Animal Science, Veterinary Science and Fisheries at the Agriculture and Forestry University for a successful conference.

Comparing to the outcomes of the Conference and the efforts to elevate the importance of goats as a species that can alleviate poverty, and improve food security and nutrition, our little inconvenience during the very long-distance traveling becomes so trivial. Just like the goal of increasing production efficiency of goats, quality is far more important than quantity.

I understand that there are many conferences to be hosted by the University in the near future, I encourage the university to engage in a thought pro-

cess to focus more on the quality of scientific programs, more participation by the students and faculty, and a smoother logistic arrangement.

I am very proud of my colleagues from IGA, Juan, Lucia, Jean-Marie, Sándor, Yingjie for taking the time to travel so far to support this regional conference. To Beth, thank you for your able leadership and your ability to represent IGA so well. On behalf of speakers and participants, I would like to extend my appreciation and admiration to Vice-Chancellor Sharada Thapaliya for your leadership and serving as the chair for this successful conference. As a former vicechancellor, myself, I must say that you are one of the most down-to-theearth vice-chancellors that I have ever met. During the past several days, I saw how well you interacted with your s, faculty, and students. I wish you a great journey as a successful vice chancellor for this young, vibrant and

aspiring university.

Last, but not least, thanks go to the student volunteers for your enthusiasm and dedication, you remind us of what university and higher education are all about.

Thank you all. Namaste!



### Congratulations to the Organizing Committee of ARCG 2019

The Asian Regional Conference on Goats has just concluded and was an incredible success.

The conference was held from October 20th to 23rd in Chitwan, Nepal, with the support of the Ministry of Agriculture and Livestock Development, Department of Livestock Services, Nepal Agricultural Research Council, Heifer International Nepal, and University Grants Commission.

The main aim of the conference was to gather researchers, academicians, and development entities to exchange knowledge and technologies generated in the field of goat research and development across the globe.

To learn more, visit the conference website: afu.edu.np/vet/arcg2019.







### Second Meeting of the PPR-GREN, Kenya

IGA just finished participating in the Second Meeting of the PPR Global Research and Expertise Network (PPR -GREN), in Nairobi, Kenya from November 13-15, 2019.

#### Concept Note

#### **BACKGROUND**

Considering the high importance of sheep and goats for the livelihood of the small farmers, and considering that Peste des petits ruminants (PPR), an important infectious disease and killer of those animals, has dramatically spread as of mid-year 2000 to reach more than 70 countries, the Food and Agriculture Organization of the United Nations (FAO) and the World Organization for Animal Health (OIE) launched the PPR Global Control and Eradication Strategy (PPR-GCES), taking lessons from the success of the Global Rinderpest Eradication that was achieved officially in 2011. Additionally, it has

been recognized in recent years that PPR could also affects wild ruminant populations, impacting biodiversity conservation. The PPR-GCES, which aims to eradicate PPR by 2030, was endorsed by participants at the International Conference on PPR organized in April 2015 in Abidjan, Côte d'Ivoire. The PPR-GCES is being implemented through the PPR Global Eradication Programme (PPR GEP) coordinated at the global level by the Joint



Beth Miller, Felix Njeumi, and Paula Menzies

FAO/OIE PPR Secretariat which was established in March 2016. To assist and advise the Secretariat, an Advisory Committee was established in June 2017. In addition to the Secretariat and the Advisory Committee, a third governance structure was foreseen in PPR-GCES: the Global Research and Expertise Network (PPR-GREN) which is expected to be a forum for scientific and technical consultations/ discussions. Indeed, although excellent vaccines and disease diagnostic tests exist currently for immediate and effective implementation of PPR eradication programme (s), the need to encourage and support PPR research activities which results might help in refining PPR eradication programme (s) for better efficiency and for speeding up the course of the campaigns was foreseen in the PPR-GCES.

**READ MORE...** 

# Announcement - 5th Asian-Australasian Dairy Goat Conference (AADGC) 2020, August 20-22, Thailand

Goat Milk: a Naturally Innovative Prescription for Better Humans and Animals Health

This conference will take place at the OTOP Building, Nonthaburi Provincial Administrative Organization (NPAO), Nonthaburi, Thailand.

#### Registration fees:

Time/Person	July 20th, 2020	after July 20th, 2020
Delegated participant	200 USD	250 USD
Student / Goat milk farmer*	150 USD	180 USD

- Registration fee includes proceedings, refreshments, lunches, field trip, and welcome dinner.
- Additional 10 USD for Koh Kred tour (22 July 2020), includes lunch.

\*with certified by goat milk association from each country.

**Timeline for paper submission and registration:**Abstract submission will be opened on February 20th, 2020

Full paper submission will be opened on May 20th, 2020

## PAPER SUBMISSION Call for papers

All participants intending to present scientific papers (oral or poster) at the AADGC 2020 conference will be got the peer review by the Scientific Committee and then the accepted papers will be published in the conference proceedings. A maximum of two papers are allowed from each registered participant.

#### Subjects

- Breeding and Genetics;
- Feed and Nutrition;
- Management;
- Health and Diseases;
- Milk and Milk Products;
- Meat and Meat Products;
- Social Economic Effects;
- Greenhouse Gas Emissions and Climate Change
- Opening for related field in Meat Goat Research

Continued on Page 11

### SMARTER meeting, Edinburgh, Scotland, November 26-27, 2019

be held in Edinburgh from 26th to 27th November 2019. One year after the start of the project, the meeting will aim to take stock of the work done during the first year, discuss the first results obtained and plan the actions to be carried out for the future.

Stakeholders meetings and farm visits are planned from 28th to 29th November 2019.

Did you know that IGA is part of the SMARTER Stakeholder Committee? Read more about it here.

#### What is SMARTER?

SMARTER stands for SMAll RuminanTs breeding for Efficiency and Resilience.

#### Summary

SMARTER will develop and deploy innovative strategies to improve Resilience and Efficiency (R&E) related traits in sheep and goats.

SMARTER will find these strategies by: i) generating and validating novel R&E related traits at a phenotypic and genetic level ii) improving and developing new genome-based solutions and tools relevant for the data structure and size of small ruminant populations, iii) establishing new breeding

The first SMARTER annual meeting will and selection strategies for various breeds and environments that consider R&E traits, SMARTER with help from stakeholders chose several key R&E traits including feed efficiency, health (resistance to disease, survival) and welfare. Experimental popula-



tions will be used to identify and dissect new predictors of these R&E traits and the trade-off between animal ability to overcome external challenges. SMARTER will estimate the underlying genetic and genomic variability governing these R&E related traits. This variability will be related to performance in different environments including genotype-byenvironment interactions (conventional, agro-ecological and

organic systems) in commercial populations. The outcome will be accurate genomic predictions for R&E traits in different environments across different breeds and populations.

SMARTER will also create a new cooperative European and international initiative that will use genomic selection across countries. This initiative will make selection for R&E traits faster and more efficient. SMARTER will also characterize the phenotype and genome of traditional and underutilized breeds. Finally, SMARTER will propose new breeding strategies that utilize R&E traits and trade-offs and balance economic, social and environmental challenges. The overall impact of the multi-actor SMARTER project will be ready-to-use effective and efficient tools to make small ruminant production resilient through improved profitability and efficiency.

SMARTER is coordinated by INRA (Dr. Carole Moreno-Romieux) and assembles 27 partners from 13 different countries and has received a funding from the European Commission (through the H2020-SFS-15-2016-2017)) for a project period of 4 years (2018-22).

To learn more, visit their website (https://www.smarterproject.eu/).

### Announcement - 5th Asian-Australasian Dairy Goat Conference (AADGC) 2020, August 20-22, Thailand (Continued from Page 10)

#### Paper submission guidelines

Papers should be not more than four pages inclusive of tables and figures (or six pages for invited papers). Authors are requested to follow the below format for paper submission:

- Title: author's name, institution, and email address of corresponding author
- Abstract: Not more than 300 words and 5 keywords
- Introduction
- Materials and Methods
- Results and Discussion
- Conclusion and Implication
- References

Download the standard format to prepare your paper for the AADGC 2020 Proceedings, CLICK HERE.

#### International advisory committee

- Dr. Juan Boo Liang (Honorary President AADGN, Malaysia)
- Dr. Jun Luo (President AADGN, China)
- Dr. Katinka De Balogh (FAORAP, Bangkok, Thailand)
- Dr. Dewi Apri Astuti (Bogor, Indonesia)
- Dr. Harinder Makkar (Rome, Italy
- Dr. Beth A. Miller (President IGA, USA)
- Dr. Pietro Celi (Secretary AADGN, USA)

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