International Goat Association

- Fostering the use of goats to provide for the needs of humankind
- Encouraging research with and development of goats to increase their productivity and usefulness throughout the world.
- Perpetuating the International Conference on Goats.
- Sponsoring the Journal of Small Ruminant Research

IGA NEWSLETTER

January 1998

IGA, 1015 Louisiana Street, Little Rock, Arkansas 72202 USA
Fax 501-476-8906 Telephone 501-376-6836 Email: Dansingoat@aol.com

INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE (ILRI) in ASIA

C. Devendra, Vice President IGA and Senior Associate ILRI

1. Until two years ago, the Consultative Group for International Agricultural Research (CGIAR) has supported for about twenty years, livestock research largely through the activities of two international livestock research centres: the International Laboratory for Research on Animal Diseases (ILRAD) in Kenya, and the International Livestock Centre for Africa (ILCA) in Ethiopia. Both institutions focused their activities in Africa. Following a decision to merge the resources of ILRAD and ILCA into a single institute charged with a global mandate, the new International Livestock Research Institute (ILRI) became operational in January 1995. ILRI`s global mandate and leadership in animal agriculture on behalf of the CGIAR, gives priority to Asia.

2. The emphasis on Asia is a demand-led process, and recognizes the following trends:

- Massive population growth rates, urban migration and continuing poverty, especially in South Asia
- Increased demand for livestock food products due to rapid economic development, increased income and changing consumer preferences
- Shifts from subsistence farming, intensification and specialization to market-oriented production and
- Considerable opportunities to improve livestock production especially, in crop-livestock systems and through integrated natural resource management and use, to alleviate poverty, enhance food security and protect the environment.

3. The process of consultation, assessment and discussion was used to clearly identify the major constraints and issues, and the opportunities for livestock improvement. The formulation of ILRI`s agenda in Asia involved two regional consultations specific to South East Asia and South Asia, held in 1995, and two specific studies: (I) An Assessment of Asian Animal Agriculture (1997) by Vercoe, J., Coffey, S., Farrell D., Rutherford A. and Winter, W. (ii) Improvement of Livestock in Crop-Animal Systems in Rainfed Agro-ecological Zones of South East Asia (1997) by Devendra, C.,Thomas, D., Jabbar, M.A., and Kudo, H.

(continued page 2)

(ILRI in Asia continued from Page 1)
The major constraints and issues, and approaches to their resolution were discussed at the ILRI Conference on Livestock Research Priorities in Asia held in Hanoi, Vietnam in May 1997. The meeting was attended by senior representatives of National Agricultural Research Systems (NARS) and Ministries of Agriculture, national and regional agricultural experts and donor agencies.

4. The priority research areas and opportunities within these to improve livestock production and develop sustainable production systems include: (i) feed resources and nutrition, (ii) livestock and the environment, (iii) animal genetic resources, (iv) animal health, (v) system analysis, (vi) socio-economics and policy, and (vii) strengthening research capacity and information exchange.

5. ILRI is now poised to implement a strategic livestock research agenda involving both human and limited financial resources. It will work very closely with Asian livestock research institutes in close partnerships with NARS, advanced research institutions, other agencies, and the private sector to provide leadership in animal agriculture, address the priority research issues, and seek improvement of livestock production in Asia.

FOOTNOTE: The Proceedings of the Consultations on Research Priorities for South East Asia and South Asia have been published and are available. The two study reports (Vercoe et al and Devendra et al), as well as the proceedings of the Hanoi Conference will be available from: The Publication Unit, ILRI, PO Box 5689, Addis Ababa, Ethiopia.

THE 8th WORLD CONFERENCE ON ANIMAL PRODUCTION

June 28 -- July 4, 1998

Seoul National University, Seoul, Korea

"Animal Production into the 21st Century for the Quality of Human Life."

More than 2,000 distinguished animal researchers, policy makers, administrators and teachers from more than 100 countries will participate in this principal international conference. Contemporary issues now confronting animal production in the world and the future role of animal industry for the quality of human life in the 21st century will be discussed.

There will be an extensive scientific program with 3 pre-conference symposia, 1 special symposium, 4 plenary and 8 review sessions, 12 symposia covering most of the common livestocks including buffalo and non-conventional animals and contributed papers in 24 different areas. An Animal Life Science Exhibition will be held concurrently during the main conference.

Seoul is both the capital and the heart of the Republic of Korea, containing about 10.2 million of the nation's 45 million people. Seoul is the financial, political, commercial, recreational, educational and cultural center of Korea. Participants will have the opportunity to explore historic and cultural sites in and around the city of Seoul through various evening events, mid- and post-conference tours.

For more information on The 8th World Conference on Animal Production, write to the Conference Secretariat, Organizing Committee, 8th WCAP, College of Agriculture & Life Sciences, Seoul National University, Suweon, 441-744, Korea.

Tel: 82-331-292-0896, Fax: 82-331-292-3801, Email: jongha@plaza.snu.ac.kr.

VII International Conference on Goats
Tours, France, May 14-20, 2000

Since 1982, four international conferences on goats have been held: Tucson, Arizona, USA, 1982, Brasilia, Brazil, 1987, New Delhi, India 1992, Beijing China, 1996. Previous conferences were held in London in 1967 and in Tours in 1971.

The participants in previous conferences have been multiple purpose scientists or technicians and specialists of goat industry. These conferences have been successful in identifying the role of goats, particularly in the South and in improving the image of goat around the world.

France has a strategic position regarding goat research and development and goat production in Europe and the Mediterranean Basin. Goats have been raised in France for millenaries, as attested by bones from goat species found in archeological discoveries of the Paleolithic age. More recently, in the last thirty years, the size of flocks has increased, but preservation of typical ancient cheeses has been achieved. France is renowned throughout the world for its fine goat cheeses.

The VII ICG in Tours will look for improvement of the scientific level of specialized sessions and widening discussions, inviting well-known specialists of animal genetics, pathology, reproduction and nutrition. More specialists of agricultural economy and rural sociology will also be invited. These scientists, not specialists of goat sector, could bring original aspects allowing progress in goat industry. The conference hopes to attract a diversity of scientists and specialist as well as young scientists preparing Ph.D. or working on original subjects.

In addition, since the conferences draw persons who work in the practical aspect of goat husbandry, the VII ICG will also address concrete subjects of interest to goat enthusiasts such as products, marketing and goat husbandry systems.

The conference will be held in a developed country for the first time in 18 years and this will provide the opportunity for a thorough presentation of the latest scientific advances in goat production. The scientific committee for the conference is composed of experts from different geographic areas and with diverse backgrounds, yet will not neglect pastoralists, economists and sociologists.

The conference will be held at the Vinci Centre in Tours, a large European metropolis and the capital of the "art of living". Less than an hour from the centre of Paris, thanks to the French High Speed Train T.G.V., Tours enjoys an exceptional location situated at the very heart of the Loire "chateaux country", providing an enchanting and charming venue.

For more information about the VII International Conference on Goats write to the Provisional Limited Organizing Committee, P. Chemineau, P. Morand-Fehr, B. Poutrel, Institut National de la Recherche Agronomique (INRA) France. Secretariat of the VII ICG, INRA Tours-Nouzilly, 37380 Nouzilly, France.
Tel: 33 47 42 76 10 Fax 33 47 42 77 43 E-mail: physiorepro@tours.inra.fr

10 Year History of the Small Ruminant Research Journal

George F.W. Haenlein, D.Sc., Ph.D., Professor, University of Delaware

For centuries goats have not been recognized as useful farm animals or maligned as destructive to the environment and only fit as the "poor man's cow."

However, scientists around the world like C. Devendra, P. Morand-Fehr, Christian Gall, A.M. Aboul Naga, Tony Cunha, Clair Terrill, Ned Raun, Peter Holst, George Haenlein, Warren Foote, Jean Boyazoglu and others were determined to change this undeserved status, because of their conviction that the goat as a milk, meat, fiber, skin and cash provider was of enormous benefit not only to millions of poor farmers and to developing countries, but beyond that in developed countries where goats have made important contributions to people with medical problems, to the gastronomic interest of upscale stores, restaurants, hotels, to connoisseurs of fine food, fine leather and luxury cashmere and mohair clothing. Thus, these scientists organized meetings in the 1970's and 80's to focus on this situation, culminating in the Third International Conference on Goat Production and Disease at Tucson, Arizona, USA, in 1982. At this time the International Goat Association was founded with Warren Foote as president. Two goals were established: to organize every 4 to 5 years another International Conference on Goats somewhere in the world where goats are important and to establish an international goat research journal for the advancement of this neglected science and promotion of goats scientifically.

At the next, the Fourth International Conference on Goats, held in Brasilia, Brazil in 1987, Warren Foote and Jean Boyazoglu founded the Small Ruminant Research Journal, following negotiations with Elsevier Science Publishers in the Netherlands and with the help of Kent Leach, publisher of The American Dairy Goat Journal.

George Haenlein was nominated and elected as the first Editor-in-Chief of the new journal. Previously he had published the first Nutrient Requirements of Goats Bulletin under the aegis of the US National Research Council and published the first Extension Goat Handbook under the sponsorship of the US Department of Agriculture.

The new journal appeared quarterly the first two years 1988 and 1989, but numbers of submitted manuscripts increased from 53 in 1987 to 137 in 1989, and as a result a more frequent issuance was warranted. Thanks to the excellent support of Elsevier associate publisher, Ken Plaxton, the new journal became firmly established worldwide. Thanks to the dedicated cooperation of an appointed editorial advisory board and countless volunteers, the peer review process yielded constructive aid to manuscript authors in an acceptable turn-around time and a widely respected reputation for the quality of the new journal.

Manuscript contributions to the new journal came in almost equal numbers from Asia, Africa and Europe over the 10 years of its existence with the Americas and Pacific countries trailing behind as had been hoped because the journal was supposed to aid first the scientists in the developing world. In subject matters, nutrition as it should be, took first place in manuscript numbers, followed by reproduction and veterinary topics, while physiology, genetics and goat products like milk, meat, fiber and skin were underrepresented, undeservedly. Goat topics made up two-thirds of all papers, sheep and other small ruminants the other third.

As the volume of work grew to more than 200 manuscripts per year, associate editors, Mohamed Fahmy, David Sherman and Tilahun Sahlu were added. In 1996, at the VI International Conference on Goats in Beijing, China, a new Editor-in-Chief, Mohamed Fahmy was nominated and elected by the Board of Directors of IGA. Finishing his tenure, George Haenlein assembled a 10-year Author and Subject Index of the journal, which covers the 25 volumes of its appearance.

The journal is now in excellent hands, well known, established and poised to make a significant contribution to the science and industry of goats and its people.

Report: SRR Editorial Committee Meeting held in Vienna on August 25, 1997

Mohamed Fahmy, Editor-in-Chief

A special issue of Small Ruminant Research will be produced to commemorate the 10th anniversary of the journal. The issue will deal exclusively with Boer goats and Dorper sheep, which are gaining wide-spread recognition. In addition the symposium "Role of Small Ruminants in the Supply of Animal Products" to be held during the 8th WCAP meeting in Korea, which is partly sponsored by IGA, will be a special issue.

A report was given on the numbers of papers read in the past two years:

Subject	1996	1997
Physiology	6	16
Health	33	22
Nutrition	38	32
Products	4	12
Reproduction	46	35
Genetics	19	21
Totals	146	137

The contribution of the retiring members of the editorial committee was acknowledged with special certificates of appreciation. Retiring members are : A. Abate, E.A. Adebowale, M.A. Akbar, Manfred Anke, E.S.A. Gihad, M. Hadjipanayotou, S.A. Hasso, W.L. Johnson, A.H. Kirton, J.J. Lauvergne, J.M. Luginbuhl, A.P. Mavrogenis, N.W. Moore, A.J. Ritar, A.J.F. Russell, K. L. Sahni, J. Vadiveloo, V.S. Vihan, R.T. Wilson.

The journal is now directed by M.H. Fahmy, Editor-in-Chief, Associate Editors: David Sherman, Health, Tilahun Sahlu, Nutrition, Salah Galal, Genetics-Systems and J.P.C. Greyling, Physiology, G.F.W. Haenlein, (Milk). The Editorial Advisory Board: M. Ashraf, S.W. Coleman, M. Galina, J.M. Gay, S. Gelaye, A.L. Goetsch, F. Guessous, M.K. Holland, V.H. Holzinger, J.E. Huston, J.M. Mandal, W.J. Koops, M.S.A. Kumar, P.C. Lefevre, J. Marcos Fernandez, R.J.F. Markham, D. Matsas, B.A. McGregor, M. Mellado, D.R. Notter, Y.W. Park, W.A. Phillips, W.E. Pomroy, M.R. Sairam, J.N.B. Shrestha, N. Silanikove, G.D. Snowder, S. Wildeus.

Correction: The email address of the Editor-in-Chief was incorrect in the IGA Membership brochure. The correct email address is: Fahmym@EM.AGR.CA

1998 IGA Memberships

Please send name, full address, phone, fax, email to Rosalee Sinn, Secretary-Treasurer, IGA, Box 808, Little Rock, Arkansas 72203 with check drawn on US bank if possible. To charge on VISA or MASTERCARD email to Dansingoat@aol.com. Include expiration date.

IGA Membership without Journal US$35.00. IGA Membership with Journal US$135.00.
Individual Sustaining Membership with Journal US$300.00.

Proceedings VI ICG, Beijing, China, two volumes, US $60.00

Goat Breeds in Nepal

C.R. Upreti, C.S. Bandupur, Agricultural Research Station

Goats are raised by Nepalese farmers for meat, pack use, manure and religious purpose. They are kept for backyard consumption and income generation. The price of goat meat has increased over 300% in the last 10 years (US$1 in 1987 and US$3 in 1997, per kilo.)

Goat Population in Nepal is estimated to be 5.78 million producing 32,040 MT fresh meat annually (18 kg dressed meat per goat). Goat is second highest in meat production (19.85%) after buffalo meat (64.9%). The remainder of about 15% meat is produced by pig (7.3%), chicken (6.00%) and sheep (1.77%). The total meat production of the country is 161,520 MT annually. (CBS 1995/96).

The Native goats in Nepal are medium sized (25-45 kg. live weight). The identified breeds are Chyangra, Sinhal, Khari and Terai goat, in trans-Himalayan region, mountain region, hill and Terai respectively. As there is gradient of topography, viable environment and climatic condition from South to North, each breed evolved is well adapted to their respective topographical zone.

Chyangra. The Chyangra is raised above 2400 m asl near Tibetan border of trans-Himalayan region where the climatic condition is cold, dry and windy. The breed constitutes only 2% of the total population. Markhor wild goat could be the progenitor of Chyangra goats that might have been gradually dispersed eastward from west through the forest of high mountainous terrain and reached to Himalayan region.

The average body weight of female is 32 kg with measurement at wither height, heart girth and body length 62.4 cm, 71.4 cm and 62.2 cm respectively. The age at first kidding is about 22 months with 265 day kidding interval. The litter size is of 1.2 kids/kidding. The average fibre production is 367$\pm$ 94 out of which 50-150 grams is fine undercoat (l8-25 u fibre diameter), called pashmira. It is best for apparel, especially wool making that cost US$150 per l.8 sq. meter. Coarse fibre is used to make doormat, rope and tent. Normally shearing is done only once in a year during Spring. Adult goats (both male and non-pregnant female) are used to carry the goods giving load at 35% of their live weight. Chyangra serves like a truck in Himalayan and trans-Himalayan region of Nepal.

Sinhal. The Sinhal goat breed is reared between 500 to 1500 m asl. Sinhals are dairy goats (15 cm long hair) mainly black, brown and white in colour. They are 25% of total goat population of the country.

The average body weight of this breed is 30-40 kg. The average wither height, heart girth, body length is 67.0 cm, 77.7 cm and 68.8 cm respectively. Age at first kidding, kidding interval is 375 $\pm$ 88 and 325 $\pm$ 52 days respectively. Sinhal are mostly seasonal breeders kidding during December to March. Mostly the Sinhal goats are singletone.

The milk production is very low (43 $\pm$ 16 lit/135 day). Adult goats produce 200 grams course fibre that is used to prepare doormat, rope, sack and tent in high mountain of Nepal. Sinhal goats are popular for load carrying in high mountains in Nepal. About 25% of adult goats are used as haulage.

Khari. Khari goats are reared in the mid-hills (300-1500 m asl) of Nepal. Mostly they are black, brown and mixed in colour. The breed is smallest of native breeds. The population is he highest (55%) among the viable native breeds. Khari goats are similar to Black Bengal goats in Bangladesh and Katjang breed of South Asia with respect to several body characteristics.

The adult weight for male and female is 30-40 kg and 25-30 kg respectively. The average wither height, heart girth, body length is 57.94 $\pm$ 0.32 cm, 65.23 $\pm$ 0.44 cm, 58.12 $\pm$ 43 cm respectively. It is highly prolific among the native breed with 1.5 liter size. The age at first kidding is 344.5 $\pm$ 20 days and the kidding interval is 207 $\pm$ 10 days. The average meat dressing percentage is 54%, (62.14% including intestines, lungs, heart, etc.)

Terai. Terai goat is raised in southern plain of Nepal near northern Indian border. This breed is well adapted around 2400 m asl. Goats are comparatively heavier (25-45 kg) and taller with pendulous ear and roman nose. External feature of the goats is similar to the Jamnapari breed, but they are smaller in body size.

Nutritional Requirements and Productivity of Egyptian Goats

The following is a summary of three published papers provided by A.Y. El-Badawi, Prof. of Animal Nutrition, National Research Center, Dokki, Cairo, Egypt. If you would like the full paper, please write to the Secretary-Treasurer of IGA by post or email.

Application of Liquid Feeding for Growing Local Goat Kids (A.Y. El-Badawi and H.M. Gado)

Ten kids trained to eagerly suckle from bottles and five naturally weaned kids were distributed into three similar groups. Animals were three months old of an initial average live body weight of 6.7±0.75 kg. Goat kids were individually fed on solid or solid plus liquid rations for a period of 12 weeks at level of 4% concentrate mixture (16.37% CP) and 2% berseem hay of their body weight.

The concentrate mixture was supplied in three forms. 100% solid in group A, 25% liquid (l0%DM) and 75% solid for group B or 50% liquid (20%DM) and 50% solid for group C. The X-ray scanning procedure was applied to monitor the oesophageal groove closure.

Live body composition was determined using the antipyrine space method and body weight gain composition was calculated as the difference between final and initial body composition. Results showed that bottle-feeding trained animals maintained the reflex of the oesophageal groove closure active till six months of age and during which the liquid diet by-passed the rumen without health hazards.

No significant differences were found in growth performance among the experimental groups. However, the digestibilities of CF and EE and nitrogen balance ($P<0.05$) increased by liquid feeding. Slight improvement in other nutrient digestibilities and efficiency of energy and protein utilization were also observed by liquid feeding. It was concluded that liquid feeding via oesophageal groove closure had no marked effect on growth of local goat kids.

Energy and Protein Requirements for Growth of Baladi Goats (A.Y. El-Badawi, T.M. El-Badawy, H.M. Gado)

In a 12 week experiment, ten growing six months old Baladi goat kids (five males and five females) of an average initial body weight of 8.93 kg were fed a ration of 63.26%TDN and 8.05%DCP. Initial and final body composition was estimated using the antipyrine space method to calculate the energy and protein requirements for growth.

Energy and protein requirements for growth of indigenous goats (Baladi) were found to be 11.29 kcal ME and 0.6 g DCP per gram body weight gain for males and 13.47 kcal ME and 0.72 g DCP for females with average values of 12.38 kcal ME and 0.66 g DCP/g daily gain. These values were higher than 7.25 kcal ME and 0.195 g DCP per gram body weight gain as suggested by the NRC (1981).

Water Requirement of Growing Local Goats Measured Under Two Climatic Thermal Conditions (A.Y. El-Badawi and H.M. Gado)

In an experiment of two phases each lasting 42 days, daily voluntary water intakes by 10 growing goats (Baladi) aged six to ten months were individually recorded at two ambient temperatures, averaging 28 degrees C (1^{st} phase) and 14 degrees C (2^{nd} phase). A uniform ration containing 90% DM and (1:1) concentrate to roughage ratio was fed ad libitum to kids in individual cages. In vivo total body water at the beginning and end of each experimental period was determined using the antipyrine space method. The results indicate that water intake by goats increased ($P<0.01$) with increasing ambient temperatures from 14 degrees C to 28 degrees C. Daily water intakes were more correlated with DM intakes ($r=0.82$ at 28 degrees C and 0.80 at 14 degrees C) than the body weight ($r=0.74$ at 28 degrees C and 0.66 at 14 degrees C). Water content of weight gain as kg (retained water) was not influenced by the daily water consumption, but it was related to amount of body weight gain.

In requesting full manuscripts, please request by title.

The Officers and Directors of the International Goat Association

President
Adel Aboul Naga (Egypt)
FAO Representative
PO Box 1476
Islamabad, Pakistan

Vice President
Pierre Morand-Fehr
FAO-CHEAM Network
INAPG Dept. of Animal
Sciences (INRA)
26 rue Claude Bernard
75231 Paris Cedex 05 France

Vice President
Christopher D. Lu
Professor and Dean
College of Agriculture
Sultan Qaboos University
PO Box 34, Alkhod
Postal Code 123
Muscat, Sultanate of Oman

Vice President
C. Devendra
Senior Associate
8, Jalan 9/5
4600 Petaling Jaya
International Livestock
Research Institute (ILRI)
Selangor, Malaysia

President for Life
Warren C. Foote
Utah State University
60 North 100 East, Box 15
Kanab, Utah 84741-3501 USA

Immediate Past President
Jean Boyazoglu
Executive Vice President
European Association for
Animal Production (EAAP)
Via della Tecnica 245
00144 Rome, Italy

Secretary-Treasurer
Rosalee Sinn
Heifer Project International
1015 Louisiana Street
Little Rock, AR 72202 USA

Small Ruminant Research
Editor-in-Chief
M.H. Fahmy (Egypt) Canada
Lennoxville Research Center
PO Box 90 Lennnoxville
Quebec, JIM 1Z3, Canada

Directors:
Augusta Njoke Abate, Kenya
N.H. Casey, South Africa
Philipe Chemineau, France
Ruth M. Gatenby, United Kingdom
Gaoju Han, China
Peter Holst, Australia
Sahr H.G. Lebbie, Kenya
Barry Norton, Australia
Robert K. Pelant, United States
Roque G. Ramirez, Mexico
Roberto Rubino, Italy
Joyce Turk, United States
Wahab Qureshi (Pakistan) USA

Associate Editors
David Sherman, United States
Tilahun Sahlu (Ethiopia) USA
E.S.E. Galal (Egypt), Rome, Italy
J.P.C. Greyling, Rep. South Africa

Honorary Editor-in Chief
George F.W. Haenlein, United States

Notices

The IGA Officers and Board of Directors will hold two board meetings: 1) during the **8th World Conference on Animal production** in Seoul, Korea, June 28-July 4, 1998 and 2) during the Annual meeting of the **European Association for Animal Production (EAAP)** which will be in Warsaw, Poland, in August. Members will be notified of exact time and date of meeting.

Goat Breeds of the World by Christian Gall. ACP-EU, Technical Centre for Agricultural and Rural Cooperation (CTA) Margraf. D-97985 Weikersheim, 1996, 186 pp. US $50.00 ISBN 3-8236-1251-4.

Improving Goat Production in the Tropics. A manual for development workers by Christie Peacock, Oxfam (UK and Ireland). Farm-Africa Publication, London, 1996, 386 pp., paperback price US $24.95, ISBN 0-85598-269-1, hardback price US $47.50 ISBN 0-85598-268-3

Dairy Goat Journal, PO Box 10, Lake Mills, WI 53551 USA. Subscriptions US$19. 1998 Calendar available. US$5.95 Visa or Mastercard welcome