



## Growth and Development of the Academic Societies and Animal Production in Korea, China and Asia over the Last 50 Years\*

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**ABSTRACT :** The Korean Society of Animal Science (KSAS) was officially born on October 8, 1956 under the leadership of Professor Sang W. Yun of Seoul National University, Seoul, Korea a few years after the end of the Korean War. At that time, there were 0.9 million Korean native cattle, 1.3 million pigs and 8.9 million chickens in Korea. Per capita income for Korea (US\$ 66) or China (US\$ 59) was about 10% of Asian's average income (US\$ 513) in 1956. Korea produced less than 0.2 million M/T of formula feed and consumed 6.1 kg/person/year of animal products. One could say that Korea was an example of an under-developed country in the world. Although the first issue of the Proceedings of the KSAS was published on October 28, 1958, regular quarterly journals of the KSAS were not published until March 1, 1969. Major activities other than publishing its journal were: holding an annual meeting and/or scientific forum at national or international level. The Asian-Australasian Association of Animal Production Societies (AAAP) was founded on September 1, 1980 at Kuala Lumpur, Malaysia with founding members from Australia, Indonesia, Japan, Korea, Malaysia, NZ, Philippines and Thailand. Thirteen AAAP Animal Science Congresses have been held in its 28 year history. Hosting countries were Malaysia (1980), Philippines (1982), Korea (1985), NZ (1987), Taiwan (1990), Thailand (1992), Indonesia (1994), Japan (1996), Australia (2000), India (2002), Malaysia (2004), Korea (2006) and Vietnam (2008). In 1988, significant progress of the AAAP was made by creating an official English journal of the AAAP entitled "Asian-Australasian Journal of Animal Sciences (AJAS)" under the initiative of the KSAS. This journal is now published monthly and distributed to more than 50 countries in the AAAP region and the world. It should be mentioned that the KSAS was able to successfully host the 3<sup>rd</sup> AAAP Animal Science Congress in 1985 and the 12<sup>th</sup> in 2006, as well as the 8<sup>th</sup> WCAP in 1998. During the last 50 years of KSAS history, per capita income of Korea increased to US\$ 17,690 (268 fold), formula feed production increased to 15 million M/T (97 fold) and consumption of animal products increased to 105 kg/person/year (17 fold). Cattle, pig and chicken numbers also increased to 2.5 million (2.8 fold), 9 million (7.4 fold) and 119 million (13 fold). This trend was also found for China and Asia, even if the rate of growth was slightly lower than that of Korea. It is expected that a similar rate of growth in economics, animal numbers, formula feed production and animal protein intake will likely be achieved by other Asian countries in the 21<sup>st</sup> century with somewhat lower rate of development than that of Korea. (**Key Words :** Korean Society of Animal Science and Technology, AAAP, AJAS, Asian Animal Science)

### GROWTH AND DEVELOPMENT OF ACADEMIC SOCIETIES IN ANIMAL SCIENCE AND ANIMAL PRODUCTION

#### Prelude

Prior to the birth of the Korean Society of Animal Science (KSAS) in 1956, South Korean people experienced the outbreak of the tragic Korean War initiated by North Korean Armed Forces on June 25, 1950. This war caused great human sacrifice and economic loss. Korean War

Damage Statistics (1996) indicated that a total 3.3 million people, consisting of South and North Korean, UN, and Chinese armed forces as well as civilian were killed or wounded during the Korean War. In addition to the human loss, estimated economic damage reached US\$ 2.28 billion. Approximately 50% of civilian houses, schools, administrative offices, medical institutions, churches, manufacturing plants, harbor facilities, railroads, bridges, power plants and coal mines were destroyed during Korean War.

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When South Korea almost lost the battle, UN armed forces, lead by US troops, came to their aid to save the Republic of Korea. A total of 16 countries (Australia, Belgium, Canada, Colombia, Ethiopia, France, Greece,

Luxemburg, Netherlands, New Zealand, Philippines, Republic of South Africa, Thailand, Turkey, UK and USA) sent military personals. Five countries (Denmark, India, Italy, Norway and Sweden) provided medical support, and 19 countries (Argentina, Bolivia, Brazil, Chile, Costa Rica, Cuba, Ecuador, El Salvador, Iceland, Israel, Lebanon, Liberia, Mexico, Nicaragua, Pakistan, Panama, Paraguay, Peru and Venezuela) provided financial support to protect South Korea's freedom and national security. Fortunately, the economy of Korea developed remarkably over the last fifty years. In this context, Republic of Korea should pay back to those countries that helped during Korea War.

### Birth of the KSAS

In the early 1950's there was only one academic society, the Korean Society of Agricultural Science in the field of agriculture. Soon after the Korean War ended, some of the leading animal scientists led by Professor Sang Won Yun of Seoul National University officially founded the Korean Society of Animal Science (KSAS) on October 8, 1956 at Milk Hall of Seoul Dairy Cooperatives located in Seoul. Professor Yun was elected to be the first president of the KSAS, and the office of the society was located at the Ministry of Agriculture and Forestry near Namdaemoon, Seoul, Korea.

It would be quite important to look back the number of major species of animals raised in Korea with some other statistics concerning per capita income, formula feed production and consumption pattern of animal products at the time when the KSAS was founded (1956). Comparison was made with China and Asia including Oceania and Pacific rim. As is seen in Table 1, animal production status was very poor for Korea compared with China or Asia. Data indicate that Korea raised only 1.6% of total animals raised in China, and only 0.7% of animals raised in all Asian countries. Per capita income for Korea (US\$ 66) or China (US\$ 59) was about 10% of Asian's average income (US\$ 513) in 1956. Korea has known to be a very much underdeveloped country at that time. Furthermore, foods of animal origin consumed by Koreans were 20% and Chinese was 30% of that consumed by average Asian people.

### Creation of the Korean Journal of Animal Science in March, 1969

Although the first issue of the Proceedings of the KSAS was published on October 28, 1958, the first issue of quarterly journals of the KSAS "Korean Journal of Animal Science" was published from March 1, 1969 by the editorial efforts of Professor In K. Han. Annual proceedings contained all papers presented at the annual meeting of the KSAS. The Korean Journal of Animal Science, on the other hand, carried original and review papers with news and notes of the society.

Publication records of the Korean Journal of Animal Science since 1958 are illustrated in the Table 2. It is clear that the number of papers published annually has steadily increased, although the publication frequency has remained bimonthly for many years since 1998.

### Introduction of the KSAS Animal Science Award and the AAAP Animal Science Award

In 1967, the Korean Society of Animal Science granted its first "Animal Science Award" to recognize distinguished Korean animal scientists. Between 1967 and 2007, a total of 66 eminent Korean animal scientists received this award. A large portion of this award fund was donated by Professor In K. Han. Professor Han has donated his Korea Science Award money given by the Korean Government in 1971. The "KSAS Distinguished Service Award" was also introduced in 1977 by the Professor In K. Han. The first award was given to Professor Sang W. Yun, the founding president of the KSAS. Currently, a total of 66 scientists and technical personals have received this award.

The AAAP has three different categories of awards. The "AAAP Animal Science Award" was established in 2000 to recognize internationally known animal scientists in the AAAP region. This award is funded for by Hans' Animal Life Science Foundation (HALSF). So far, six famous animal scientists have received this award. In order to stimulate the research activities and submission of manuscripts to the AJAS by young Asian scientists under age of 40 years, the "AJAS-Cargill Agribrand Purina Inc. Outstanding Research Award" was introduced in 1990 with

**Table 1.** Per capita income, number of major species of animals in Korea, China and Asia in 1956

	Korea	China	Asia <sup>1</sup>
Per capita income (US\$)	66*	59 <sup>2</sup>	513 <sup>3</sup>
Cattle number (MH)	0.87**	49.51***	319.0***
Pig number (MH)	1.26**	85.62***	118.47***
Chicken number (MH)	8.92**	540.85***	1,088.21***
Formula feed (M/T)	0.16**	21.83***	68.18***
Consumption of animal products <sup>4</sup> (kg/person/year)	6.10***	8.40***	28.70***

<sup>1</sup> Data including Oceania and Pacific. <sup>2</sup> China Statistical Yearbook, 1984.

<sup>3</sup> Estimated value based on averaged annual economy growth in 1950s-1060s.

<sup>4</sup> Data including beef, pork, chicken meat, eggs and milk. NA: Not available.

\* Statistics Year Book 1982. Bank of Korea. \*\* Korea Agricultural Statistic Year book, 1956. \*\*\* Data in 1961 (Source: FAO, 1961).

**Table 2.** Publication record of the Korean J. of Animal Science since 1958

Year	Volume	No. of issues	Pages	Remark
1958	1	1	56	Published 1 <sup>st</sup> proceedings
1969	11	4	408	Published quarterly Kor. J. Anim. Sci.
1985	27	12	801	Holding the 3 <sup>rd</sup> AAAPASC <sup>1</sup>
1988	30	12	774	Published Vol 1, No 1. of AJAS <sup>2</sup>
1998	40	6	733	Holding the 8 <sup>th</sup> WCAP <sup>3</sup>
2005	47	6	1,118	
2006	48	6	974	Holding the 12 <sup>th</sup> AAAP ASC
2007	49	6	898	
Total	48	276	28,226	

<sup>1</sup> Asian-Australasian Association of Animal Production Societies (AAAP) Animal Science Congress.

<sup>2</sup> Asian-Australasian J. of Animal Science. <sup>3</sup> World Conference on Animal Production.

the donation of Cargill Agribrand Purina Inc. A total of 19 young animal scientists have received this award. For the selected Asian animal scientists who presented an excellent scientific paper at each AAAP Animal Science Congress, "AAAP Excellent Presentation Award" was created in 1992 with the donation of individuals or AAAP member societies. A total of 44 young scientists received this award since it was initiated.

#### Birth of the AAAP in September, 1980

A historical event was happened in 1980. The Asian-Australasian Association of Animal Production Societies (AAAP) was officially founded in Kuala Lumpur, Malaysia on September 1, 1980. It is important to note that the KSAS was a charter member of the AAAP.

By reviewing available minutes of the AAAP Council Meetings, records on the AAAP Animal Science Congress programs, proceedings of each AAAP Animal Science Congress and "Quarter Century History of the AAAP", the followings in Table 3 is considered as the best official record for the AAAP membership.

Data in Table 3 shows that there were 8 founding members of the AAAP. Taiwan was accepted as a member in 1982 and Iran was accepted as the 17<sup>th</sup> member country in 2002. At the council meeting in Busan Korea in 2006,

China and Sri Lanka became members of AAAP. It was a memorable moment for AAAP when China finally joined AAAP as a regular member in 2006. Now AAAP with a total of 19 members encompass major area of Asian and Australasian region and became a leading association in animal science in the world.

Though the AAAP is important, activity and involvement of member countries is limited. Thus, one important aspect of the society is to encourage and promote more active involvement of all member countries.

Regarding the membership of P. R. China, many individuals and all council members tried hard during the last decade. Most definite movement was made at the 12<sup>th</sup> AAAP Council Meeting in New Delhi, India in September 2002, which decided that China would be accepted as a member of the AAAP on condition that an official application letter be submitted to Secretary-General and the content be in accordance to the AAAP Statutes in regard with the membership of Taiwan. This was also confirmed at the 13<sup>th</sup> AAAP Council Meeting in 2004. Finally, acceptance of China as a member has been materialized in 2006 at 14<sup>th</sup> Council Meeting.

The procedure to become a member is fairly easy and straightforward. There is no special application form: all that needs to be done is to submit a written application letter

**Table 3.** Member country of the AAAP (as of September 23, 2006)

Year	Country	Decision was made in:	Remark
1980	Australia, Indonesia, Japan, Korea, Malaysia, New Zealand, Philippines, Thailand	Malaysia	Founding Members of the AAAP
1982	Taiwan	Philippines	2 <sup>nd</sup> Council Meeting
1987	Bangladesh <sup>1</sup>	New Zealand	5 <sup>th</sup> Council Meeting
1990	Papua New Guinea <sup>1</sup>	Taiwan	6 <sup>th</sup> Council Meeting
1992	India, Vietnam <sup>1</sup>	Thailand	7 <sup>th</sup> Council Meeting
1994	Mongolia <sup>1</sup> , Nepal <sup>1</sup> , Pakistan <sup>1</sup>	Indonesia	8 <sup>th</sup> Council Meeting
2002	Iran <sup>1</sup>	India	12 <sup>th</sup> Council Meeting
2006	China <sup>1</sup> , Sri Lanka <sup>1</sup>	Korea	14 <sup>th</sup> Council Meeting

<sup>1</sup> AAAP Animal Science Congress has not been held in these countries.

**Table 4.** Per capita income, number of major species of animals in Korea, China and Asia in 1985

	Korea	China	Asia <sup>1</sup>
Per capita income (US\$) <sup>2</sup>	2,309	292	3,228
Cattle number (MH)*	2.94	62.71	373.85
Pig number (MH)*	2.85	313.86	380.91
Chicken number (MH)*	51.08	1,266.89	3,117.77
Formula feed (M/T)*	6.45	170.49	297.45
Consumption of animal products <sup>3</sup> (kg/person/year)*	42.20	28.50	48.00

<sup>1</sup> Data including Oceania and Pacific. <sup>2</sup> World Bank, 1992. <sup>3</sup> Data including beef, pork, chicken meat, eggs and milk.

\* FAO statistics, 1985.

to the Secretary-General and council for approval. So far, no applications have been rejected. Only on one occasion the Council Meeting had to deliberate the pros and cons of Taiwan's application in 1982. No one really objected to Taiwan's admission except that caution had to be taken to determine its legitimacy, since some members feared that with Taiwan's involvement they might lose their own government's support. If this should happen they were in no position to participate actively in the AAAP affairs. Fortunately, this did not happen and the AAAP continued to flourish with Taiwan as a member.

#### **KSAS: a member of the World Association for Animal Production (WAAP)**

The KSAS submitted an application letter for membership to the headquarter of the WAAP located in Rome, Italy in 1979. Dr. Kally, Secretary-General, has made postal vote among council members for their approval of the President Y. Nishikawa of the WAAP. Finally, after two year wait, KSAS became a member of the WAAP on March 1, 1981. In 1983, Professor In K. Han was elected to be a Vice-President of the WAAP, when the 5<sup>th</sup> WCAP was held in Tokyo, Japan.

#### **The 3<sup>rd</sup> AAAP Animal Science Congress**

The 3<sup>rd</sup> AAAP Animal Science Congress was successfully hosted by the KSAS on May 6-10, 1985 at Sheraton Walker Hill Hotel, Seoul, Korea (Table 6). Growth in animal production and per capita income of Korea, China and Asia for this time period can be seen Table 4. It is apparent that the growth rate of animal production is about the same degree as that observed between the 1970's and 1980's. However, growth rate of personal income, formula feed production and intake of animal products for Koreans were much higher than that for Chinese or Asian (Table 4).

#### **Official Journal of the AAAP (AJAS)**

The KSAS initiated the creation of an official quarterly journal of the AAAP entitled "Asian-Australasian Journal of Animal Science (AJAS)" in March, 1988. The current printing office is located in Seoul, Korea, and now publishes a monthly journal of SCIE. Prof. In K. Han

**Table 5.** Some statistics on the publication of the AJAS (1988-2007)

Items	Total number
Volumes	20
Issues	148
Papers published	3,498
Pages published	23,161
Subscribers of the AJAS	950

served as founding editor-in-chief until he was succeeded by Prof. Jong K. Ha. Some Statistics on the publication of the AJAS are recorded in Table 5.

#### **The previous AAAP Animal Science Congress in summary (1980-2006)**

The AAAP Animal Science Congress is an important forum that draws together scientists, as well as professionals, engaged in livestock development and trade in Asia. It is also through this forum that ideas are disseminated and developed. Scientists from many parts of Asia rarely have the opportunity to attend scientific conventions due to lack of finance, but the support scheme provided by the organizers is so essential to speakers, who may not have participated otherwise.

There have been 12 AAAP Congress meetings once every two to four years, depending on decision of host society. The 3<sup>rd</sup> and 5<sup>th</sup> meetings took place at three year and the 9<sup>th</sup> at four years interval. The rest of the meetings were held in every two years. The Congresses were held in 10 different countries and countries that have hosted twice so far are Malaysia and Korea (Table 6). Member countries that have yet to host the AAAP Animal Science Congress are China, Bangladesh, Iran, Mongolia, Nepal, Pakistan, Papua New Guinea, Sri Lanka and Vietnam until 2006. The 11<sup>th</sup> council which was held in Sydney recommended that a rotation should be established within the Societies with the resources to host Congress and this rotation should be based on the historical order that had been established by the AAAP. However, this idea was amended at the 14th Council Meeting in Busan, Korea, when it was recommended to set up suitable guidelines for the selection of hosting countries.

As far as the number of participants is concerned, it has

**Table 6.** Summary of previous AAAP Animal Science Congresses (1980-2006)

ASC	Country	Year	President	Chairman of O.C.	No. of Participants (Country)	No. of papers		Proc. (Pages)
						Invited (Symp.)	Contributed	
1 <sup>st</sup>	Malaysia	1980	S. Jalaludin	Osman B. Din	243(15)	19	68	482
2 <sup>nd</sup>	Philippines	1982	V. G. Arganosa	G. C. Orinion	777(15)	14	125	-
3 <sup>rd</sup>	Korea	1985	In Kyu Han	D. A. Kim	1,039(28)	56	345	1,884
4 <sup>th</sup>	New Zealand	1987	A. R. Sykes	K. E. Jury	581(28)	35	380	519
5 <sup>th</sup>	Taiwan	1990	T. P. Yeh	S. C. Chyr	659(26)	20	381	1,083
6 <sup>th</sup>	Thailand	1992	C. Chantalakhana	C. Chantalakhana	887(31)	64	195	1,035
7 <sup>th</sup>	Indonesia	1994	E. Soetirto	E. Soetirto	894(31)	10	397	969
8 <sup>th</sup>	Japan	1996	T. Morichi	S. Watanabe	1,110(35)	94	627	1,949
9 <sup>th</sup>	Australia	2000	J. Ternouth	T. Scott	733(31)	27	609	1,361
10 <sup>th</sup>	India	2002	P. N. Bhat	V. L. Chopra	471(114)	114	419	377*
11 <sup>th</sup>	Malaysia	2004	Z. A. Jelan	L. C. Liang	427(27)	30	359	1,279
12 <sup>th</sup>	Korea	2006	I. K. paik	S. J. Ohh	1,250(28)	61	1,207	3,488

\* Program booklet.

been generally increasing, reaching more than 1,000 in the 3<sup>rd</sup>, 8<sup>th</sup> and 12<sup>th</sup> meetings in Korea, Japan and Korea, respectively as is appeared in Table 6. Some of meetings were attended by scientists from more than 30 different countries.

The AAAP Animal Science Congress has a history of 26 years since its inception. It is now an international forum with participation not only from Asia and Pacific region but also over the world. With the Congress generating big interest in the region, it is confident that the numbers of participants will continue to grow.

Perhaps the most important outcome of the Congress is the Proceedings of the AAAP Animal Science Congress, which are a useful compilation of both the plenary lectures and scientific papers. While the plenary lecture covers a broad area of interest highlighting the advances in animal science and production, the latter displays individual contribution to the sector. The Congress Proceedings are important documents due to the fact that they record numerous contributions by scientists and professionals in the region. Proceedings of the 2<sup>nd</sup> congress was not published, and that of the 10<sup>th</sup> Congress has yet to be published although all the abstracts were printed (Table 6).

The quality and quantity of presentations was continuously improved. In part, this is because of the large numbers attending the congress, which provides opportunities for scientists, especially the younger ones, to learn from their peers. As a result, the standard of research has improved which augurs well for the livestock industry in this region.

Congress themes (Table 7) reflect main interests of the region at the time of the congress. Production strategies and efficiency were major concerns during the early meetings, while sustainability of livestock production and environment have become main areas of focus of the

meetings held in recent years.

#### **Numbers and categories of papers presented at the different AAAP Animal Science Congress (1980-2006)**

As is shown in the Table 8, the number of scientific papers presented at the different AAAP Animal Science Congresses is steadily increasing. At the 12<sup>th</sup> AAAP Animal Science Congress, the largest number of papers (1,268) were presented and followed by 9<sup>th</sup> (594), 8<sup>th</sup> (585), 10<sup>th</sup> (499), 4<sup>th</sup> (370), 5<sup>th</sup> (369), 7<sup>th</sup> (367), 11<sup>th</sup> (357), 3<sup>rd</sup> (340), 6<sup>th</sup> (208), 2<sup>nd</sup> (121), and 1<sup>st</sup> (73) AAAP Congresses. On average, it appears that the number of papers presented is between 300 and 600 except the 12<sup>th</sup> AAAP.

It was found that the numbers of scientific papers presented at the AAAP Animal Science Congress by 19 AAAP member countries varied significantly. Korea (1,042), Japan (991), Australia (521), India (470) and Taiwan (444) presented more than 400 papers throughout the 12 Congresses. On the other hand, less than 100 papers were presented by Bangladesh (54), Mongolia (2), Nepal (14), Pakistan (68), Papua New Guinea (23), and Vietnam (27). Between these two groups, Indonesia (291), Malaysia (265), New Zealand (247), and Thailand (219) presented between 100 and 300 papers. This difference in presentation capability among AAAP member countries could partly be solved by increasing financial support for those under-represented countries to participate more actively in the Animal Science Congress in the future.

By analyzing data of the last 12 AAAP Animal Science Congresses, many papers were also presented by non-AAAP countries throughout the world. Some of major contributing countries include: P. R. China (190), USA (129), UK (34), Sri Lanka (33), Germany (20), Egypt (19), Canada (17), France (17), Kenya (16) and Netherland (14). These countries presented more papers than the other non-

**Table 7.** List of themes for the AAAP Animal Science Congresses (1980-2006)

AAAP Animal Science Congress	Date and venue	Themes
1 <sup>st</sup>	September 2-5, 1980 Serdang, Malaysia	Animal Production and Health in the Tropic
2 <sup>nd</sup>	November 8-13, 1982 Manila, Philippines	Livestock Development Strategies in the Tropic
3 <sup>rd</sup>	May 6-10, 1985 Seoul, Korea	Efficient Animal Production for Asian Welfare
4 <sup>th</sup>	February 1-7, 1987 Hamilton, N.Z	Not available
5 <sup>th</sup>	May 27-June 1, 1990 Taipei, Taiwan	Not available
6 <sup>th</sup>	November 23-28, 1992 Bangkok, Thailand	Animal Production and Rural Development
7 <sup>th</sup>	July 11-16, 1994 Bali, Indonesia	Sustainable Animal Industries and the Environment
8 <sup>th</sup>	October 13-18, 1996 Tokyo, Japan	Partnership for Sustainable Livestock Production and Human Welfare
9 <sup>th</sup>	July 2-7, 2000 Sydney, Australia	Animal Production for a Consuming World
10 <sup>th</sup>	September 23-29, 2002 New Delhi, India	Animal Production for Food and Environmental Security
11 <sup>th</sup>	September 5-9, 2004 Kuala Lumpur, Malaysia	New Dimensions and Challenges for Sustainable Livestock Farming
12 <sup>th</sup>	September 18-22, 2006 Busan, Korea	Challenges of Animal Industry for the Wellbeing of Mankind

AAAP member countries of the world.

It is interesting to note that slightly more than 11% (621) of papers were contributed from non-AAAP countries and about 89% papers (4,939) came from the AAAP member countries (5,560 in total).

Hereby, the names of countries, and number of papers presented during the 12 AAAP Animal Science Congresses

are listed:

AAAP Member Countries (19): Australia (521), Bangladesh (54), India (470), Indonesia (291), Iran (158), Japan (991), Korea (1,042), Malaysia (265), Mongolia (2), Nepal (14), New Zealand (247), Pakistan (68), PNG (23), Philippines (103), Taiwan (444), Thailand (219), Vietnam (27).

**Table 8.** Summary of the papers presented at the AAAP Animal Science Congress (ASC) by member countries (17 countries; 4,939 papers)

Country \ ASC	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>	Total
Australia	9	4	14		9	13	15	11	344	11	16	17	521
Bangladesh	0	0	1	1	2	8	12	1	6	8	5	10	54
India	1	2	8	18	15	18	18	9	15	340	0	26	470
Indonesia	13	11	29	17	26	15	112	24	16	2	18	9	291
Iran	0	0	1	0	2	3	2	1	4	5	43	97	158
Japan	3	9	58	24	75	25	69	375	75	50	72	156	991
Korea	0	11	131	13	44	16	43	49	34	36	81	584	1,042
Malaysia	33	38	24	12	14	18	35	12	12	11	44	12	265
Mongolia	0	0	1	0	0	0	0	1	0	0	0	0	2
Nepal	0	0	0	0	1	4	4	3	1	1	0	0	14
New Zealand	4	1	9	174	17	6	2	4	28	0	0	2	247
Pakistan	0	0	14	14	0	2	0	3	8	1	1	25	68
Papua New Guinea	1	1	2	2	5	2	4	3	1	1	0	1	23
Philippines	3	37	8	6	15	6	5	10	4	1	4	4	103
Taiwan	0	0	29	20	130	20	29	45	28	25	44	74	444
Thailand	6	7	10	11	14	47	16	30	16	5	27	30	219
Vietnam	0	0	1	0	0	5	2	4	2	2	2	9	27
Total	73	121	340	370	369	208	367	585	594	499	357	1,056	4,939

**Table 9.** Summary of previous WCAP (1963-2003)

Date & Venue	President	Chairman, OC	Papers presented	No. of participant	No. of country
1 <sup>st</sup> Sept. 2-7, 1963 (Italy)	W. R. Trehane	W. R. Trehane	66+200	336	54
2 <sup>nd</sup> July 14-20, 1968 (USA)	R. E. Hodgson	R. E. Hodgson	33+186	600	60
3 <sup>rd</sup> May 22-30, 1973 (Australia)	R. H. Watson	R. H. Watson	86-120	600	54
4 <sup>th</sup> Aug. 20-26, 1978 (Argentina)	F. Torres	M. A. A. Morales	34+106	800	52
5 <sup>th</sup> Aug. 14-19, 1983 (Japan)	Y. Nishikawa	K. Mimura	600	1,229	61
6 <sup>th</sup> June 27-July 1, 1988 (Finland)	E. Cunningham	E. Poutiainen	450	1,000	70
7 <sup>th</sup> June 28-July 2, 1993 (Canada)	R. Blair	R. J. Hudson	446	625	72
8 <sup>th</sup> June 28-July 4, (Korea)	In K. Han	Jong. K. Ha	210+988	2,159	91
9 <sup>th</sup> Oct. 26-31, 2003 (Brazil)	Akke J. van der Zijpp	Jorge Lópes	774	600	43

(a) = Main reports, (b) = Short contribution.

*Non-AAAP Countries (50)*: Afghanistan (2), Austria (2), Belgium(2), Bhutan (1), Bosnia (5), Brazil (7), Brunei (1), Bulgaria(1), Cambodia (2), Canada (17) Columbia(1), Czech (4), Denmark (2), Egypt (18), Ethiopia (1), France (17), Germany (20), Iraq (2), Island (2), Israel (1), Italy (18), Jordan (5), Kazakhstan (4), Kenya (16), Kuwait (1), Netherland (14), Nigeria (5), Norway (2), Oman (2), P. R. China (199), Poland (3), Portugal (1), Rumania (2), Russia (3), Saudi Arabia (4), Scotland (2), Singapore (11), South Africa (5), Spain (2), Sri Lanka (33), Sweden (1), Syria (1), Tajikistan (1), UAE (2), Uganda (1), UK (34), Uruguay (1), USA (129), Venezuela (1), West Samoa (10).

#### **The 8<sup>th</sup> WCAP was held in June-July, 1998 in Seoul, Korea**

As an interim activity of the 7<sup>th</sup> (1993) and 8<sup>th</sup> WCAP (1998), an international symposium on "Supply of Livestock Products to Rapidly Expanding Urban Population" was organized by the KSAS and the WAAP on May 16-20, 1995 at the Hoam Faculty House, Seoul National University in Seoul, Korea. This event was financially supported by the Food and Agriculture Organization of the United Nations. The 8<sup>th</sup> World Conference on Animal Production (WCAP) was held on June 28-July 4, 1998 at Seoul National University, Seoul, Korea under the leadership of Professor In K. Han, President of the WAAP and Professor Jong K. Ha, Chairman of Organizing Committee. The statistics in the Table 9 indicate that the 8<sup>th</sup> WCAP was known to be one of most successful world conference in WAAP history.

#### **Quarter Century History of the AAAP was published in November, 2005**

A book entitled "Quarter Century History of the AAAP (1980-2005)" was published jointly by the AAAP and the Hans' Animal Life Science Foundation (HALSF) on November 1, 2005. The editorial Committee of this book consisted of 9 members: Professor In K. Han as Chairman and Drs. C. Chantalakhana (Thailand), E. Sato (Japan),

Jong K. Ha (Korea), S. Watanabe (Japan), L. C. Hsia (Taiwan), H. Yano (Japan), S. Jalaludin (Malaysia), and I. Barger (Australia). This book contains history and structure of the AAAP, the AAAP Animal Science Congress, the AJAS, AAAP Animal Science Awards, and some recommendations for the future of the AAAP. The AAAP is grateful to the HALSF for their support of the printing cost of the mentioned book.

#### **Golden anniversary of the KSAS (1956-2006) and hosting the 12<sup>th</sup> AAAP Animal Science Congress in September 2006 in Busan, Korea**

During the 50 years of its history, the KSAS has had 32 presidents and 16 editors-in-chief, who have published a total of 48 volumes with approximately 26,500 pages of Korean Journal of Animal Sciences. Furthermore, the KSAS hosted three important international conferences, the 3<sup>rd</sup> and 12<sup>th</sup> AAAP Animal Science Congress in 1985 and 2006, and the 8<sup>th</sup> World Conference on Animal Production in 1998. These were great successes. An additional unforgettable role of the KSAS was creation and continuous publication of an official journal of the AAAP called "Asian-Australian Journal of Animal Science (AJAS)". Most of the AAAP awards such as the AAAP Animal Science Award, AJAS-CAPI Outstanding Research Award and Excellent Presentation Award were introduced by the key members of the KSAS or feed companies in Korea. Korean Animal Scientists and the KSAS have played such a critical role in the development of national, regional and international animal agriculture.

Table 10 shows that tremendous increase and/or improvement in animal production, economic status, production of formula feed and consumption of animal products during a period of last 50 years (1956-2005). During this period per capita income of Korea increased by greater than 268 folds and that of China was about 34 folds. Average Asian income increased only 15 fold as much as in 1956. It is also clear that the rate of growth in the number of major species of animals and production of formula feed for

**Table 10.** Per capita income, number of major species of animals in Korea, China and Asia in 2006

	Korea (inc.)	China (inc.)	Asia <sup>1</sup> (inc.)
Per capita income (US\$) <sup>2</sup>	17,500 (×268)	1,010 (×34.1)	7,883 (×15.3)
Cattle number (MH)*	2.48 (×2.8)	117.66 (×2.3)	460.75 (×1.5)
Pig number (MH)*	9.38 (×7.4)	510.62 (×6.0)	618.88 (×5.2)
Chicken number (MH)*	119.181 (×13.3)	4,356.97 (×8.1)	8,980.42 (×8.3)
Formula feed (MT)	15.473 (×96.7)	103.004 (×4.7)	480.235 (×7.0)
Consumption of Animal products (kg/person/year)**	105.33 (×17.2)	92.94 (×11.1)	77.205 (×2.7)

<sup>1</sup> Data including Oceania and Pacific. <sup>2</sup> World Bank, 2006.

<sup>3</sup> Korea Agricultural & Forestry Statistical Yearbook, 2006. <sup>4</sup> China Statistical Yearbook, 2005.

<sup>5</sup> Data in 2002 (Source : FAO, Food balance sheet, 2002).

\* FAO statistics, 2006. \*\*Data including beef, pork, chicken meat, eggs and milk.

(% increase): compared to data in 1956.

Korea was significantly higher than that of China or Asia by 2005. Annual consumption amount of animal products are also higher for Korea (105.3 kg/person/year) than that for China (92.9 kg/person/year) and Asia (77.2 kg/person/year) as is illustrated in Table 10. These data indicate that animal production in most Asian countries has been steadily growing.

## CONCLUSION

Based on the above analyses and observations during the last 50 years beginning in 1956, it may be concluded that Korea, China and Asia have remarkably grown in animal production levels and the activities of academic societies. In the case of Korea, the KSAS played some important roles to enhance activities of academic societies by holding its annual meetings and/or technical seminars/symposia, and by hosting international conferences such as the AAAP Animal Science Congress and the WCAP. Publishing the societies' journal since 1956 has also played important role. Moreover, the KSAS was known to be a core society that stimulated academic collaborative programs of international nature including hosting of the AAAP Animal Science Congress in 1985 and 2006, hosting the FAO/WAAP/KSAS International symposium in 1995 and the 8<sup>th</sup> WCAP in 1998 in Korea. The KSAS is co-publishing society of the AJAS with the AAAP.

These academic interactions certainly resulted in promoting the development of animal production in Korea and Asia. Increased production of animal products (11 times) significantly stimulated the improvement of both income source (268 fold) and animal protein consumption (17 fold) of Koreans. It is expected that activities of academic societies and animal production would be even further expanded in Asian countries, including Korea and China in the forthcoming 50 years in the 21<sup>st</sup> century.

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