History of the KSAST and Future Development Directions of the Korean Livestock Industry

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Curriculum Vitae

- 2001~현재 서울대학교 식품동물생명공학부 교수
- 2024~현재 축산정책포럼 회장
- 2025~현재 농협중앙회 목우촌 사외이사
- 2022~현재 (주)사조동아원 사외이사
- 2014~현재 양돈수급조절협의회 위원장
- 2012~현재 부경양돈농협 기술고문관
- 2022 (사)한국축산학회 회장, AAAP 회장
- 2006~2012 (주)팜스코 사외이사, 도드람양돈농협 사외이사
- 1994~1999 미국 오하이오주립대학교 축산학과 박사
- 1983~1990 서울대학교 축산학과 학사, 석사

History of the KSAST and Future Development Directions of the Korean Livestock Industry

July 8th 2026

The Korean Society of Animal Science and Technology (KSAST)

Yoo Yong Kim

Contents

1. History of the Korean Society of Animal Science
- Korean Society of Animal Science (1956~1999)
- Korean Society of Animal Science & Tech. (2000~2016)
- Korean Society of Animal Science (2017 ~ Present)

2. Development of the English-Language Journal

1) Journal of Animal Science and Technology (JAST, 2014 ~ Present)
- Official Journal of KSAST

2) Animal Bioscience (2021.1~ present)
- Asian-Australasian J. of Ani. Sci. (AJAS, 1988 ~ Dec. 2020)
- Official Journal of AAAP

3. Past Achievements and Future Challenges of the Korean Livestock Industry

History of KSAS (1956~1999)
(KSAS: Korean Society of Animal Science)

Oct.8th 1956. Founded at the meeting room of the Seoul Dairy Cooperative Association in Jeong-dong, Seoul. The society office was established within the Livestock Policy Division of the Ministry of Agriculture (Namdaemun, Seoul)
"First magazine "Chuksan", "Poultry (L.E. Card)" Translation & Extension

Oct. 1960. The Society Office was relocated to the Dept. Anim. Sci. SNU

May 6 ~ 10th 1985. The 3rd AAAP Animal Science Congress was held (Walkerhill Hotel, Seoul)

Jan. 1997. The Society Office was moved to Konkuk University

June 28th ~ July 4th 1998. Hosting the 8th WCAP (Seoul National University)

Dec. 1998. The Society Office was moved to KOFST #908

Dec. 28th 1999. Integration of Four Academic Societies
한국축산학회, 한국영양사료학회, 한국동물유전육종학회, 한국낙농학회
➔ Establishment of the Korean Society of Animal Sciences and Tech.
➔ Sciences of Poultry, Reproduction and Grassland & Forage remain independent, and their integration has been deferred.
한국가금학회, 한국번식학회, 축산환경학회, 한국조지학회는 현재도 통합보류 상태임

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History of KSAST (2000 ~ Present)

Jan. 1st 2000: Korean Society of Animal Sciences and Technology
➔ Launch of the KAST Journal (Korean)

Sep. 18th ~20th 2006: Hosting of the 12th AAAP ASC (Bexco, Pusan)
Co-Hosting of the 50th Anniversary of the KSAST

Feb. 2014 : Publication of the "Livestock Terminology Dictionary"

June 23rd ~ 24th 2016: The 60th Anniversary of the KSAST (Seoul National Univ.)

Nov. 2016: The General Assembly approved a resolution to change the Society's name from the "Korean Society of Animal Science & Technology" to the **"Korean Society of Animal Science"**
➔ The change required final approval after a review of the Society's bylaws by the Government

Jan. 1st 2017: Lunch of the Korean Society of Animal Science

May 25th 2017: Relocation to Suite 1618, Suseo Tower, Seoul
➔ The office was purchased for KRW 210 million using the surplus funds from the 12th AAAP

Aug. 23~26 2022: 19th AAAP Animal Science Congress (Jeju, ICC)

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History of Journal of Anim. Sci. & Tech.

1999 – Korean J. of Ani. Sci. was selected as a candidate Journal by Korea Research Foundation (KRF)

2006 – 50th Anniversary Meeting of KSAST (Bexco, Busan)

2011 – Accredited Journal by KCI

2013 – ACOMS Submission System Setup and Deployment

2014 – Lunched of the English-language Journal "J. of Ani. Sci. & Tech." under leadership of Inho Choi to an Open Access Journal
Established an integrated manuscript and management and publication (DOI, XML, ORKID)

2015 – Indexed in PubMed (articles published from 2014 onward)

2016 – 60th Anniversary Meeting of KSAST (Seoul National Univ., Seoul)

2018 – **Under the leadership of Prof. Sejong Oh, application for SCIE indexing submitted in Dec. 2018**
Indexed in SCOPUS (approx. KRW 500 Mil. won since 2014)

2019 – Indexed in the SCIE (Science Citation Index Expanded)

2026 – 70th Anniversary Meeting of KSAST (ICC, Jeju)

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Meeting with BMC in 2018

일시	회의 내용	논의 사항
1월 26일	BMC 담당자와의 화상회의	BMC의 APC 비용 저감화 요청
2월 9일	BMC 담당자로 부터 JAST APC 재계약에 대한 이메일을 받음	30편: 학회부담 €930/편 10편: 저자부담 €1,200/편 -40편 발간 기준 €1,065/편 (약 140만원/편)
2월 12일	BMC 담당자에게 답신 메일	학회에서 충분히 시간을 갖고 논의해서 통보해 주겠다는 메일 발송
6월 29일	영문학술지 편집위원회 개최(중앙대)	SCIE 등재 준비를 위한 TFT 구성 (BMC에서 재계약시 재정적 부담 시뮬레이션 논의)
8월 9일	**허선 과편협위원장(한림의대) 컨설팅 (BMC와 계속 같이 가는 것이 유리할까?)**	**결론: 유리한 점이 별로 없음**
9월 12일	한국축산학회 4차 이사회	BMC와의 결별 및 신규 출판사 승인 (거목출판사) 도메인 확보 및 BMC 논문 이전 작업 개시
11월 16일	신규 JAST 홈페이지 회원 공지	신규 투고 시스템 및 학술지 홈페이지 Open
11월 18일	BMC 담당자에 이메일 재계약 여부 통보	축산학회 총회에서 BMC 계약 연장을 안하기로 했음을 통보

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Consulting by Prof. Sun Huh

*Journal of animal science and technology*를 SCOPUS, SCIE 에 등재시키기 위하여 BMC와 계속 같이 하는 것이 유리할까?

허선
한림의대

한국축산학회 학술지 모임
2018. 8.9. 오후 4시
수서타워 1618호

- Conclusion -
It is not a disadvantage, but there is also no aspect that stands out as an advantage.

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항목	2018	2019	2020
Public APC (저자가 부담)	10편 €1,200 = **약 158만원** €12,000 = **약 1,580만원**	15편 €1,200 = **약 158만원** €18,000 = **약 2,844만원**	20편 €1,745 = **약 229만원** €34,900 = **약 4,582만원**
Society Covered Articles	30편	30편	30편
APC for Society covered articles (학회가 부담)	€930 = **약 122만원** €27,900 = **약 3,663만원**	€930 = **약 122만원** €27,900 = **약 3,663만원**	€1,100 = **약 144만원** €33,000 = **약 4,333만원**
Total Cost	€27,900 = **약 5,243만원**	€27,900 = **약 6,507만원**	€33,000 = **약8,915만원**

2018년 평균 송금보내실 때 환율; 1,313원/€

- ✓ 학회가 부담하는 가격은 할인되어 €930 이지만 이것도 저자가 내야 함.
- ✓ 2016년 부터 게재료(50만원/편)를 받고 나머지를 학회가 부담하였음.
- ✓ 재계약시, 학회가 2018년 3,243만원, 2019년 4,257만원, 2020년 6,415만원 이상을 현금으로 송금해야 함.
- ✓ BMC와의 계약이 필요하는가? 에 대한 논의를 시작함.

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Notice of Non-Renewal of the Publishing Agreement with BMC

Re: Message from Sejong (Journal of Animal Science and Technology)

회신 | 전체 회신 | 전달 | ...

DP **Dylan** Parker <dylan.parker@biomedcentral.com>
받는 사람 Sejong Oh
참조 Sunny Kim; Vicky Brewis
2018-11-18 (일) 오후 8:14

Dear Dylen,

Sorry for late reply. There was a director meeting of the Korean Society of Animal Science & Technology on Oct 18th, a council on Oct 30th, and 11th this month the General meeting of society members was held.
I expressed at the board meeting that we extend our contract with BMC, and we should publish the 48 articles per year at least. I stated again that if we are to extend the contract with BMC for 3 years, the overhead cost could be around US$100,000.

Not only is BMC an exemplary publisher, but also enhanced the quality of our journals. I also expressed that another great benefit with BMC is that there was no need for unnecessary associates being added to the publication process, which would keep our costs low. If we are not extending with BMC, we would have to bring on board at least 1 more associate.

However, the some of directors disagreed and did not accept my proposition. Even at the council meeting, they said the same. I felt rather bitter about their decisions, so I did not attend the general meeting, but during the final members assembly they decided not to extend the contract with BMC.

I asked to the president for resignation of my position as Chief-editor by the phone, and currently waiting for their confirmation. How can one not see the numerous benefits that BMC provides while reducing our operating costs to the minimum? This was surely a disappointing moment for me.

Anyway, I want to thank you for all the help and support. It has been a tremendous experience for me and I hope our paths will cross in the near future.

Best wishes,

Sejong

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2026 JAST Editorial Board Members

직책	성명	영문명	영문소속	심사전문분야
Editor-in-Chief	김영훈	Younghoon Kim	Seoul National University	Animal microbiology and biotechnology, Animal product
Associate Editors-in-Chief	송민호	Minho Song	Chungnam National University	Non-ruminant nutrition
	김민석	Minseok Kim	Chonnam National University	Ruminant nutrition
Editors	공창수	Changsu Kong	Kyungpook National University	Non-ruminant nutrition
	김현범	Hyeun Bum Kim	Dankook University	Animal microbiology and biotechnology, Animal disease
	김준모	Jun-Mo Kim	Chung-Ang University	Animal genietics/breeding, Animal microbiology and biotechnology
	김명후	Myunghoo Kim	Seoul National University	Animal microbiology and biotechnology, Ruminant nutrition
	한건준	Kun-Jun Han	Louisiana State University, USA	Forage and Feed technology
	박규현	Kyu-Hyun Park	Kangwon National University	Animal environments, Animal welfare
	박희복	Hee-Bok Park	Kongju National University	Animal genietics/breeding
	허선진	Sun Jin Hur	Chung-Ang University	Animal product, Meat Science
	박탄솔	Tansol Park	Chung-Ang University	Ruminant nutrition, Animal microbiology and biotechnology
	김성학	Sung-Hak Kim	Chonnam National University	Animal Microbiology and Biotechnology, Cell biology
	최정석	Jungseok Choi	Chungbuk National University	Animal product, Meat Science
	서자겸	Jakyeom Seo	Busan National University	Ruminant nutrition
	김진수	Jin-Soo Kim	Kangwon National University	Non-ruminant nutrition
	이승환	Seung Hwan Lee	Chungnam National University	Animal genietics/breeding
	오성진	Seongjin Oh	Hokkaido University, Japan	Ruminant nutrition
	허정민	Jung Min Heo	Chungnam National University	Non-ruminant nutrition
	유경록	Kyung-Rok Yu	Seoul National University	Animal microbiology and biotechnology, Stem cell biology
	송수연	Sooyeon Song	Jeonbuk National University	Animal product, Dairy Science, Animal microbiology and biotechnology
Junior Editors	김종혁	Jong Hyuk Kim	Chungbuk National University	Non-ruminant nutrition
	박상우	Sangwoo Park	Gyeongsang National University	Non-ruminant nutrition
	이준희	Joonhee Lee	Kyungpook National University	Animal environments, Animal welfare
	함지연	Jiyeon Ham	Chungnam National University	Animal reproduction, Animal microbiology and biotechnology
Ethics Editor	조철훈	Cheorun Jo	Seoul National University	Animal product, Cultured meat science

A total of 28 editors are currently serving JAST.
Beginning in 2026, 4 Junior Editors are appointed to increase the participation of early-career researchers in the editorial process

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JAST Publication Statistics

Items	2023 Vol.65	2024 Vol.66	2025 Vol.67	2026 Vol.68	Total
1	18	16	18	21	73
2	15	16	17	18	66
3	16	16	16	21	69
4	16	16	16	-	48
5	16	16	16	-	48
6	16	18	17	-	51
총계	97	98	100	60	355
Number of Submission	291	343	372	(150; As of May)	

Manuscript submissions to JAST have consistently increased year by year

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Performance Analysis of JAST in 2026

2024 JOURNAL IMPACT FACTOR

3.2 (Q1)

View calculation

JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS

2.9

View calculation

Calculation

Journal Impact Factor ™ is calculated using the following metrics:

$$\frac{\text{Citations in 2024 to items published in 2022 (356) + 2023 (258)}}{\text{Number of citable items in 2022 (94) + 2023 (96)}} = \frac{614}{190} = 3.2$$

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Performance Analysis of JAST in 2026

Journal Impact Factor contributing items

Citable items (190) | Citing Sources (203)

TITLE	CITATION COUNT
Gut microbiome-produced metabolites in pigs: a review on their biological functions and the influence of probiotics	28
Perspectives and advances in probiotics and the gut microbiome in animals	22
Effects of different *Bacillus licheniformis* and *Bacillus subtilis* ratios on nutrient digestibility, fecal microflora, and gas emissions of…	13
How to develop strategies to use insects as animal feed: digestibility, functionality, safety, and regulation	13
Recent strategies for improving the quality of meat products	13
Enhanced γ-aminobutyric acid and sialic acid in fermented deer antler velvet and immune promoting effects	12
Heat stress and stallion fertility	12
Development of strategies to manufacture low-salt meat products-a review	11
The roles of growth factors and hormones in the regulation of muscle satellite cells for cultured meat production	11
Comparative analysis of the pig gut microbiome associated with the pig growth performance	10

Highly cited publications are concentrated in emerging research areas that have become key issues in the livestock industry, such as microbiomes, insect-based feed, livestock environmental sustainability, companion animals, and cultured meat etc.

By the way, what are its practical applications in livestock production ?

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Performance Analysis of JAST in 2026

CATEGORY
AGRICULTURE, DAIRY & ANIMAL SCIENCE
11/86

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2024	11/86	Q1 *	87.8
2023	10/80	Q1	88.1

Rank by JIF before 2023 for AGRICULTURE, DAIRY & ANIMAL SCIENCE

EDITION
Science Citation Index Expanded (SCIE)

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2022	18/62	Q2	71.8
2021	35/62	Q3	44.35
2020	20/63	Q2	69.05
2019	20/63	Q2	69.05

CATEGORY
VETERINARY SCIENCES
12/170

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2024	12/170	Q1 *	93.2
2023	16/167	Q1	90.7

Rank by JIF before 2023 for VETERINARY SCIENCES

EDITION
Science Citation Index Expanded (SCIE)

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2022	35/144	Q1	76.0
2021	58/145	Q2	60.34
2020	39/146	Q2	73.63
2019	38/141	Q2	73.40

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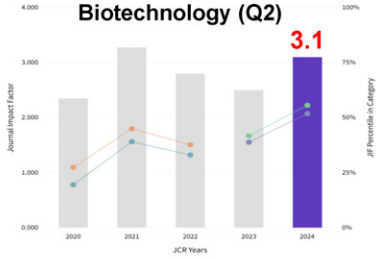
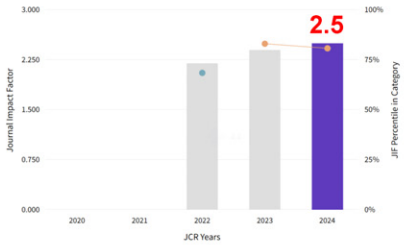
Performance Analysis of JAST in 2026

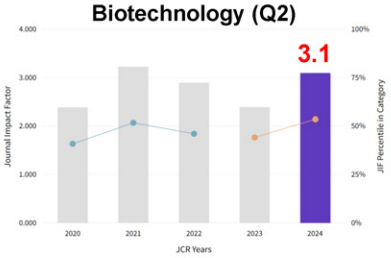
Journal of Microbiology and Biotechnology (Q2)



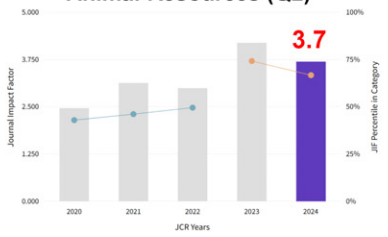
Animal Bioscience (Q1)



Food Science and Biotechnology (Q2)



Food Science of Animal Resources (Q2)



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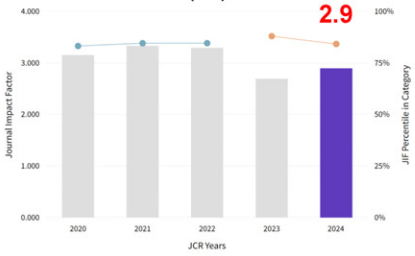
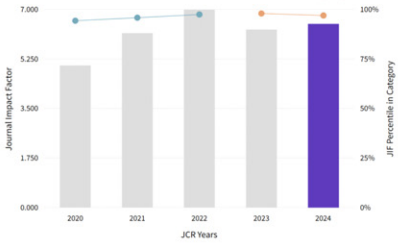
Performance Analysis of JAST in 2026

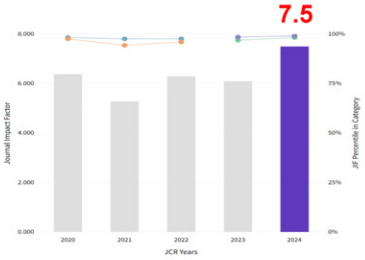
Journal of Animal Science (Q1)



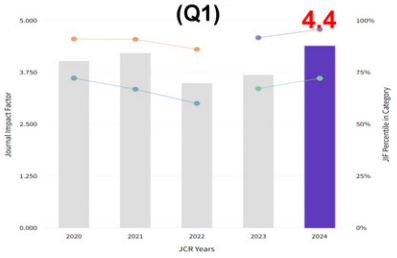
Journal of Animal Science and Biotechnology (Q1)



Animal Nutrition (Q1)



Journal of Dairy Science (Q1)



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AAAP

(Asian-Australasian Association of Animal Production Societies)

- **Founded in 1980 with 8 member countries,** currently 19 member countries: Australia, Bangladesh, China, India, Indonesia, Iran, Japan, Korea, Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Taiwan, Thailand, Vietnam
- **Activities : Biennial AAAP ASC, Official Journal (Anim. Biosci.) Publication**
- Permanent Secretariat of AAAP: Suite 1618 Suseo Tower, Seoul Korea
- Secretary General of AAAP Secretariat: All managerial works for AAAP with 6 years term by approval by the Council
- Secretary General of AAAP Secretariat

2000 ~ 2010	Prof. J. K. Ha
2011 ~ 2024	Prof. S. J. Ohh
2025 ~ Present	Prof. Y. Y. Kim

- **A resolution was adopted that the President of the AAAP Congress and the President of KSAST shall be the same person whenever the AAAP Congress is held in Korea**

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AAAP ASC in Korea

The 3rd AAAP ASC

Date: May 6~10 1985, Place: Walkerhill Hotel, Seoul
President: In K. Han, Chairman of OC: D. A. Kim,
Secretary General of OC: H. W. Kim

The 12th AAAP ASC

Date: Sep. 18~22 2012, Place: Bexco, Busan
President: In K. Paik, Chairman of OC: S. J. Ohh
Secretary General of OC: Y. Y. Kim
➔ Donated an AAAP surplus of KRW 220M to KSAST
➔ Purchased the Society Office at Suseo Tower in 2017

The 19th AAAP ASC

Date: Aug. 23~26 2022. Place: ICC, Jeju
President: Yoo Yong Kim, Chairman of OC: Sejong Oh,
Secretary General of OC: Jun Heon Lee
➔ Funds were deposited into the Society's Savings Account

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The 21st AAAP ASC

Date: Oct. 28~31 2026. www.aaap2026.org

Place: Hanoi, National Convention Center

President: Nguyen Zuan Duong, Vice President: Do Duc Luc

Early-bird registration deadline	31st July 2026
Normal registration opens	1st August 2026
Presenter registration deadline	31st August 2026

AAAP prize awardee was confirmed : Sang Jip Ohh

The 22nd AAAP ASC

Date: Sep. 2028.

Place: Pattaya, Thailand

President: Suthep V., Vice President: Chaiyapoom Bunchasak

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History of AJAS, Animal Bioscience

1987 Established and approved at the 4th AAAP ASC

1988 Lunched with the Journal of Korean Society of Animal Nutrition and Feed Science

Office location: 1988 ~ Feb. 2000 Seoul National Univ. Suwon Campus
Mar. 2000 ~ Mar. 2004 Gwacheon Officetel, Kyeonggido
April 2004 ~ Present Suite 708 Sammo Sporex, Sillimdong,
Purchase Office by bank loan (KRW 100 Mil. J. K. Ha and Y. Y. Kim)

2000. 2. 21. Declare "Official English Journal of KSAST"

Name of Journal

1988 ~ Dec. 2020 Asian-Australasian Journal of Animal Sciences
Jan. 2021~ Present **Animal Bioscience**

Editor-in-chief:

In K. Han (Mar.1988 ~ June 1994/ Aug.1998 ~ Oct. 2001)
Dong Am Kim (Sep. 994 ~ June 1998)
Jong K. Ha (Nov. 2001 ~ Dec. 2025)
Cheol H. Yun (Jan. 2026 ~ Present)

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The Evolution of South Korea's External Policies on the Livestock Industry

GATT (1967~1980): Strong protection policies for key agricultural products such as rice and beef

➔ South Korea benefited from favorable conditions by being recognized as a developing country

UR (1986~1994): Beginning of agricultural tariffication in international trade

➔ The elimination of non-tariff barriers began

➔ Pressure increased to open the domestic agricultural market

➔ The government started reducing agricultural subsidies

➔ Most agricultural markets were opened, but rice secured a temporary exemption from tariffication

WTO (1995): Opening of the domestic agricultural market

➔ The domestic beef market was fully liberalized, and tariffs on agricultural products were reduced

➔ Government support shifted from price-support policies for agricultural products to direct payments and measures aimed at improving agricultural competitiveness

Rice Market Liberalization Debate (1995–2015): Temporary exemption from rice tariffication until 2013

➔ **Beginning in 2015, rice imports became subject to a 513% tariff** 21

The Evolution of Korea's External Policies on the Livestock Industry

FTA Era (2004~Present) : The Beginning of Global Competition

2004. Korea-Chile FTA – Competition in grapes and other fruit markets

2007. Korea-ASEAN FTA – Agreement signed with the 10 ASEAN member countries, covered agricultural products, services sectors

2011. Korea-EU FTA – Competition intensified across the livestock sector

➔ Imports of cheese, pork, and wine increased, while exports of automobiles, electronics, and ships grew

➔ Domestic agriculture shifted from a protection-oriented system to a competitiveness-oriented system

2012. Korea–U.S. FTA – Competition in livestock products intensified in the domestic market

2015. FTAs with China, New Zealand, Vietnam, and Canada

➔ Broad competition began across agricultural and livestock products

2022. Regional Comprehensive Economic Partnership (RCEP)

➔ A trade agreement involving 15 countries in the Asia-Pacific region (30% of the world's population and GDP) 22

The History of the Korean Livestock Industry (1950 ~ '59)

Because of Korean War, Korea's livestock industry was severely damaged

Hanwoo – During the colonial period, only brown Hanwoo remained
- White, Black, Tiger and White Hanwoo began to be restored from 1990s
- Before 1950, cattle were mainly used for draft and farming purpose
- Hanwoo markets were formed nationwide with traditional 5-d markets

Dairy Cattle – Before the Korean War: about 1,000 head
- After the war, decreased to 289 head (1954), increased again to 766 head by 1959

Swine – small-scale backyard farms with 1–2 pigs per household
- Around 1950, there were about 1 million pigs
- Feed consisted largely of food scraps and agricultural by-products

Laying Hen – Eggs were regarded as a very valuable source of nutrition
- Eggs were often sold in small bundles of ten

Broiler – There was no specialized broiler industry
- Chickens were considered special foods reserved for special occasions

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Development of the Korean Hanwoo and Dairy Industries (1956 ~ '80)

Hanwoo – Widespread confiscation and illegal slaughter of cattle
- Hanwoo breeding and genetic improvement programs were initiated
- The breeding objective shifted from draft cattle to beef cattle (1950s)
- Livestock AI center was established by Nonghyup (1960s)
- The Livestock Industry Act was enacted, introducing cattle markets and auction systems
- An artificial milk replacer for Hanwoo calves was developed

Dairy Cattle Industry
- After the Korean War, the dairy cattle population declined to 289 head
- In 1961, dairy cattle were imported from New Zealand
- In 1963, 271 dairy cattle were imported from the US and Canada.
- **In 1967, additional dairy cattle were imported from Japan using funds from the Korea–Japan Claims Settlement Agreement.**
- Professor Yong-Bin Lee of Seoul National University introduced AI technology from Japan, enabling the rapid expansion of superior cattle
- In 1979, the Dairy Herd Improvement (DHI) Program was launched

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Development of the Korean Hanwoo and Dairy Industries (1981 ~ '00)

Hanwoo – Population was increased 1.94 Mil. head in 1983
- **In 1983, the Hanwoo Improvement Center was established**
- In 1987, proven breeding bulls were selected, and their semen was distributed nationwide
- **In 1992, the Livestock Carcass Grading System was introduced**
- From 1995 to 1998, a nationwide cattle identification and computerized management system was implemented
- **In 1999, the National Hanwoo Association was established**
- Genetic improvement programs were expanded and implemented at the individual farm level.

Dairy Cattle – In 1981, high-quality dairy cattle semen was imported from the US
- By 1985, a total of 113,059 dairy cattle had been imported from overseas.
- Population increased from 1,956 head in 1962 to 544,000 head in 2000, representing a 278-fold increase
- In 1994, the first four proven dairy sires were officially selected
- UR settlement, imports of all dairy products, except skim milk powder
- In 1997, the Dairy Promotion Act was revised, and the School Milk Program became an established national program
- In 1999 livestock wastewater were strengthened to protect the Han River

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Development of the Korean Hanwoo and Dairy Industries (2001 ~ Present)

Hanwoo – A system for high-quality premium Hanwoo beef has been stablished.
- Continuous efforts for genetic improvement, branding programs
- Following the COVID-19 pandemic, beef consumption increased ➔ oversupply ➔ decline in Hanwoo prices
- Check-off Program launched (Nov. 1st 2008)
- Although substantial research has been conducted in the field of BT many of these technologies have not yet been fully adopted at the farm level ex) ET, Twin production, Cloning, Transgenic cattle, Fluorescent Hanwoo

Dairy Cattle – dairy cow has decreased, while milk production per cow has increased
- Since 2002, free school milk programs have been provided
- The Dairy Check-off Program was launched on February 20, 2013
- In 2014, domestic milk production reached a record high of 2.2 million tons.
- Since 2017, dairy product imports have exceeded domestic milk production
- Due to Korea's declining birth rate, consumption of fluid milk has decreased, while cheese consumption has increased.
- Beginning in 2026, tariff-free imports of dairy products from the US and EU

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Development of the Korean Swine Industry
(1956 ~ ′80)

Swine – In 1960s, pig inventory 1 mil. pigs, backyard farming

- Samsung established the Swine Production Division at Yongin
  - May 1973: The Yongin Natural Farm pig farm was opened, marking the beginning of large-scale commercial pig farming in Korea
  - The operation expanded to a herd size of 60,000 pigs, becoming the largest pig farm in Asia at the time.
  - Introduced 3-way crossbreeding, artificial insemination (AI), computerized herd management, and vertically integrated production systems.
  - In 1991, Samsung Group completely withdrew from the swine industry
- **In 1970, pig inventory 1.2 mil. pigs, swine farms 1 mil.**
- In 1973, Cheil Breeding Co., was established
  - Wooden and steel trusses with slate roofing began to be used in pig housing
  - Automatic feeding systems were introduced
  - controlled ventilation gradually replaced natural ventilation in swine buildings
- In 1978, Established Korea Pork Producers Association
- In 1980, pig inventory 2.84 mil., swine farms 0.65 mil.

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Development of the Korean Swine Industry
(1981 ~ ′00)

Swine: Farm consolidation and specialization
- The beginning of productivity improvement efforts in swine production

- **The establishment of domestic swine breeding companies (Darby)**
  - The beginning of large-scale imports of superior breeding stock from abroad
  - Adoption of the Landrace × Yorkshire × Duroc 3-way crossbreeding system
- **Emergence of large-scale pig farms raising more than 1,000 pigs**
- **Expansion of commercial feed production led by feed companies**
- **Increasing efforts to improve productivity and production efficiency**
  - Widespread adoption of artificial insemination (AI)
  - Modernization of swine housing facilities
  - Dissemination of advanced pig management technologies
- **Growing popularity and widespread consumption of pork**
  - Pork emerged as the dominant meat in domestic meat consumption
- 1993–1999: Establishment of the Korea Meat Export Association
  - beginning of pork exports to Japan and terminated because of FMD (2000)

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Development of the Korean Swine Industry
(2001 ~ Present)

Swine – Disease Outbreaks and Strengthening of Biosecurity Measures

- 2002: Outbreak of Foot-and-Mouth Disease (FMD) ➔ suspension of pork exports
- 2010–2011: FMD outbreak resulted in the culling of approximately 3.3 mil. Livestock, including 3.14 mil. of pigs
- Establishment of dedicated government agencies, including the Bureau of Animal Health Policy and the Bureau of Animal Welfare Policy

➢ **Vertical Integration of the Swine Industry**

- Increasing integration of swine-related companies across the production chain.
- Development of vertical integration systems led primarily by feed companies and breeding stock companies

➢ **Adoption of ICT and smart farming technologies**

- Implementation of automated feeding, liquid feeding, environmental control, AI-based technologies, and remote farm management
- Livestock manure management became a major challenge for the swine industry
- A nationwide ban on ocean dumping of livestock manure took effect in 2012

➢ **ESG, Animal Welfare, Farm Odor Problems**

- Check-off Program launched (July 1st 2004)
- Antibiotics issue (Ban on AGP from July 1st 2011)
- Carbon Neutrality Policy

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Development of the Korean Poultry Industries (1956 ~ '00)

Poultry – 1958: Establishment of the Korean Poultry Research Society

- Imported chicken breeds began to be introduced from overseas in the mid-1950s.
- The 1960s marked the early stage of part-time and specialized commercial poultry farming.
- 1962: Establishment of the Korea Poultry Association; 1969: Launch of the monthly poultry magazine "Wolgan Yanggye (Monthly Poultry Farming)".
- Consumption of chicken meat and eggs increased significantly during the 1970s

➢ **In the early 1970s, poultry production shifted from floor-rearing systems to battery cage** improving production efficiency and flock management

Broiler - Introduction of imported broiler breeds in the 1960s

- Importation of broiler breeder stocks beginning in 1965
- Commercial production and marketing of specialized broiler feeds
- Establishment of the first dedicated broiler slaughter and processing plant in 1968

➢ **1970s: A Period of Rapid Growth for the Korean Poultry Industry**

- Introduction of pure-line stocks provided the foundation for poultry breeding
- Establishment of feeding programs for layers and broilers
- Productivity improvements through protein nutrition research and the use of synthetic AAs

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Development of the Korean Poultry Industries (1980 ~ '00)

Poultry – Entered an era of full-time commercial production

- Increasing specialization within the industry, including hatcheries, brooding operations, and egg grading and packing centers (EPCs).
- Introduction and marketing of specialty eggs.
- Development of the egg processing industry (including liquid, dried, value-added egg)
- The layer industry experienced a prolonged boom during the mid-1970s.
- the number of large-scale poultry farms and various diseases are increased

➢ **Chicken meat imports began in 1997**

- The chicken meat self-sufficiency rate declined to the 80% in 2008
- Expansion of supermarkets and hypermarkets enhanced poultry product distribution
- Shift from whole-bird sales to cut-up parts and processed poultry products

➢ **Emergence of integrated broiler production companies**

- Harim established its poultry processing operation in 1991
- Productivity improvements through protein nutrition research and synthetic AAs
- Diversification of poultry manure treatment methods (drying, composting, pelletizing)

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Development of the Korean Poultry Industries (2001 ~ Present)

Poultry – Restoration and genetic improvement of native chicken

- Development of purpose-specific native chicken strains (e.g., Woorimatdak)
- Declining number of farms but increasing poultry population
- Implementation of the Egg Production Environment Labeling System on Aug. 2018

➢ **Check-off Program Launched**

- July 1st 2008 Broiler Check-off Program Launched
- Aug. 1st 2009 Egg Check-off Program Launched

➢ **Repeated AI outbreaks leading to large-scale culling of poultry**

- 2012–2014: Approximately 20 million birds culled due to AI
- 2016–2017: Approximately 38 million birds culled during the HPAI outbreak
- Since 2017, outdoor ranging of poultry has been prohibited from Oct. to Feb.
- Since 2017, winter restrictions on duck placement have been enforced to prevent AI outbreaks

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Development of the Korean Feed Industry
(1956 ~ '80)

In 1955, Hanwoo .87mil. Swine 1.26 mil. Poultry 892mil.

- 1959: Seoul Livestock Cooperative signed a contract to supply 300,000 eggs to the U.S. military
  - Imports of feed sorghum and Thai rice bran began to support feed manufacturing
  - In 1964, Domestic concentrate feed production surpassed 1 mil. tons

- **Launch of the Five-Year Economic Development Plans**
  - July 1961: Establishment of the Korea Feed Industry Association (KFIA)
  - 1962: Introduction of tariff exemptions for imported feed grains
  - 1963: Enactment of the Feed Control Act
  - 1964: Number of licensed feed mills increased to 46

- **The 1970s: A Period of Rapid Growth for the Korean Feed Industry**
  - 1977, Korea's per capita GNP exceeded US$1,000
    ➔ Feed: Over mil. tons for poultry feed (1977), swine feed (1979)
  - Government-controlled feed prices were liberalized in 198
  - Feed Price Stabilization Fund introduced in 1975
  - Rapid growth of livestock populations, particularly dairy cattle
  - 1979: 78 feed mills with a combined capacity of 8,780 tons/day

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Development of the Korean Feed Industry
(1980 ~ '00)

Growing demand for livestock products and feed price deregulation

- 1981: Establishment of the Nonghyup
- 1983: Cattle price collapse caused major damage to the Hanwoo industry
- 1984: Korea Feed Association headquarters relocated to Seocho-dong, Seoul

- **Seminars on feed tech. and animal nutrition began in the 1980s**
  - Participation by the Korea Feed Association, U.S. Grains Council, and Canadian Embassy
  - Seminars held 2–4 times annually with contributions from academics and researchers
  - Introduction of short courses in animal nutrition and feed science for industry personnel
  - Expansion of international cooperation and tech. exchange in feed production

- **1989: Compound feed production reached 10 million tons**
  - UR Agreement,opening of the beef market; full liberalization in 2001
  - Import liberalization of pork and poultry products began in 1997
  - Expansion of feed additives and feed supplements since the 1990s

- **The 1990s marked a period of stagnation in compound feed production**
  - Private feed companies dominated the poultry, swine, and dairy feed sectors, while Nonghyup feed focused on cattle feed
  - Beginning of overseas expansion by major feed companies

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Development of the Korean Feed Industry
(2001 ~ Present)

- **Livestock Becomes the Leading Sector of Korean Agriculture**
  - Livestock's share of agricultural output increased from 14.9% in 1970 to 41.9% in 2010
  - The livestock sector accounted for about 60% of total agricultural losses associated with FTA implementation
- **Large-scale livestock disease outbreaks**
  - Introduction of various diseases through international exchange and importation of foreign breeds
  - FMD outbreaks began in 2000
  - 2007 BSE crisis significantly affected the Hanwoo industry
  - 2010–2011 FMD outbreak led to the culling of approximately 3.5 million animals
  - Recurring AI outbreaks and ASF outbreaks since 2019
- **Introduction of the HACCP system**
  - Initially applied mainly to processing facilities in other countries
  - Expanded to the farm level in Korea beginning in 2006
- **Global expansion of the Korean feed and livestock industry**
  - Expansion of the feed and swine industries into Southeast Asia
  - Further expansion into the United States, the EU, South America, and India

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The Role of Academic Societies in the Development of the Korean Livestock Industry

- **The Importance of Leadership in Academic Societies**
  - Promote transparent and efficient governance
  - Make every effort to secure financial resources through fundraising
  - Strengthen academic activities and industry collaboration
- **Views on Future Research Directions**
  - Promote balanced development across research disciplines
  - Support research that advances the Korean livestock industry and related sectors
    ➔ Emphasize practical applications and technology
  - Identify and foster research areas needed by the livestock industry
- **Continued support and investment for the development of the journals**
  - Sustained investment in the SCI-indexed English journal to enhance its global competitiveness
  - Establishment of a committee or center to document the history of the Society and the livestock sector (70th Anniversary Initiative)
- **Strengthen international collaboration with researchers**
  - Further revitalize AAAP and reinforce Korea's role as a leading country
  - Promote academic exchange and technical assistance for developing countries

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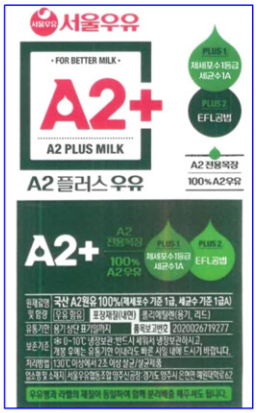

Is the Dairy Industry a Sunset Industry ?

- **Coca-Cola launched a premium milk brand, Fairlife** (formerly marketed as Select Milk), and its fluid milk sales increased by 25.3% in 2025, reaching about KRW 1.4 trillion (US$1 billion).

- **Approximately 70% of Holstein dairy cows in Korea produce A1 β-casein**
  - In A1 β-casein, the 67th amino acid is histidine, while in A2 β-casein it is proline
- Originally, all cattle produced A2 β-casein. A mutation that occurred thousands of years ago gave rise to cattle producing A1 β-casein
- **Studies have suggested that symptoms of lactose intolerance may improve by approximately 20–50% when consuming A2 milk**

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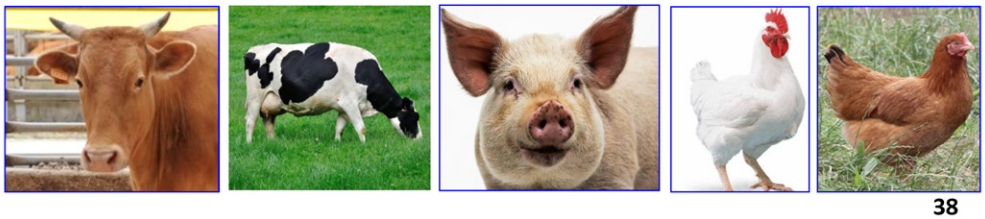
  Senior Managing Director, Ick Sub Kwon (Kyesung Laying Hen, Ltd)
- Feed: Korea Feed Association (KFA)



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Thank you very much for your kind attention~~