11th Asían Buffalo Congress

25th – 27th October, 2024

Venue: BCDM, Savar, Bangladesh

website: www.abc2024.org

Theme: Buffalo for safe food and sustainable production

The Congress is organized with the endorsement of these prestigious institutions



We thank the Official Sponsors for their support to the congress and the buffalo promotion



Buffalo for safe food, money and environment

Buffalo once called Asian animal and beast of burden has now become global animal due to globalization of the animal for its outstanding food value, economic benefit of rearing and its ability to sustain in all environment. This species contributes 15% of the total milk produced in the world. However, 98.91% of the buffalo milk and 96.44% of the buffalo meat are production in the Asian region.

Climate change has been identified as the most catastrophic phenomena affecting all forms of life on Earth during the 21st century. These changes affect all eco-systems and are a perceived threat to livelihood, food security and sustainable development. To achieve this, sustainable strategies must be put in place to produce and supply enough nutritious and safe food for a growing population. Water buffalo is an emerging species worldwide and can contribute significantly to more sustainable and safe food production in the long term.

The number of buffalo is increasing in India, Pakistan, Nepal, China, Italy, South America and some part of the world. However, the number of buffalo is decreasing in South East Asia, Sri-Lanka, Bangladesh and other countries. It is important that all stake-holders and scientists involved in buffalo production and research contribute to a global strategy that addresses global food and environmental challenges.

Under this backdrop, Asian Buffalo Association (ABA) in cooperation with Bangladesh Buffalo Association (BBA), Department of the Livestock Services of Bangladesh, Bangladesh Livestock Research Institute, Bangladesh Agricultural University have teamed-up to host the 11th Asian Buffalo Congress on 25th -27th October, 2024 at Savar, Dhaka, Bangladesh. The congress will provide a unique platform of networking among the scientists, professionals and policy makers not only from Asia, but also from all over the world. Moreover, the scientific deliberations, knowledge sharing and discussions during the congress will add more scientific value on buffalo research and help addressing the key issues of buffalo production and its sustainable development.

Program of 1st half of day 1: 25TH October, 2024

Time	Program	Resource person		
9.00 -10.00 am	Registration			
10.00 – 10.10 am	Opening of the congress	Miss Farida Akter, Honorable Adviser, Ministry of Fisheries and Livestock & All		
10.10- 10.30 am	Welcome address	Dr. Ashok Kumar Balhara, Secretary, Asian Buffalo Association		
10.30 – 11.00 am	Theme paper Buffalo for safe food and sustainable production	Dr. T.K. Datta Director. ICAR-CIRB, India		
11.00- 11.15 am	Special guest Speech	Professor Antonio Borghese Secretary, International Buffalo Federation, Italy		
11.15-11.25 am	Special guest speech	DR. Md. Reajul Huq, Director General, Department of Livestock Services, Bangladesh, Farm Gate, Dhaka, Bangladesh		
11.25 -11.35 am	Special guest speech	Dr. Sayeed Mahmood Belal Haider, Secretary, Ministry of Fisheries and Livestock, Dhaka, Bangladesh		
11.35-11.45 am	Guest of Honour speech	Prof. Dr. A.K. Fazlul Haque Bhuiyan, Vice-chancellor, Bangladesh Agricultural University, Mymensingh, Bangladesh		
11.45-12.00 am	Chief guest speech	Miss Farida Akter, Honorable Adviser, Ministry of Fisheries and Livestock, Dhaka, Bangladesh		
12.00-12.15 pm	Vote of thanks	Dr. Hiranmoy Biswas Secretary, Local organizing committee, ABC, 2024		
12.15-12.30 pm	President speech	Prof. Dr. Md. Omar Faruque President, Asian Buffalo Association		
12.30-14.30 pm	Lunch and prayer			

Program of 2nd half of day 1: 25TH October, 2024

Session for Invited papers

Chair:

Dr. Sayeed Mahmood Belal Haider, Secretary, Ministry of Fisheries and Livestock, Dhaka, Bangladesh

Co-Chair:

DR. Md. Reajul Huq, Director General, Department of Livestock Services, Bangladesh, Farm Gate, Dhaka, Bangladesh

Professor Dr. Bhuminand Devkota, University of Agriculture and Forestry, Chitwan, Nepal

Time	Program	Resource person
14.30 -15.00 pm	Potential of water buffalo in world agriculture: Challenges and opportunities	Professor Antonio Borghese, Secretary General, International Buffalo Federation, Italy
15.00 – 15.30 pm	Potential of water buffalo in Asian agriculture: Challenges and opportunities	Dr. Inderjeet Singh Vice President, Asian Buffalo Association, India
15.30- 16.00 pm	Feeding of buffaloes based on local feed resources to enhance rumen fermentation efficiency and mitigate methane emission	Professor Dr. Metha Wanapat, Khon Kaen University, Thailand
16.00 – 16.15 am	Tea Bre	eak

Scientific Session: Buffalo ecology, climate, welfare and sustainability

Chair:

Mr.A.T. M. Mostafa Kamal, Additional Secretary (Livestock), Ministry of Fisheries and Livestock, Dhaka, Bangladesh

- 1.Dr S M Jahangir Hossain, Director General, Bangladesh Livestock Research Institute, Savar, Dhaka, Bangladesh.
- **2.**Mr Hasibur Rahman, Additional Deputy Managing Director, ACME Laboratories Ltd. Dhaka, Bangladesh

16.15-16.40 pm	Keynote	Buffalo contributes to	Dr. Antonella Chiariotti
_	paper	sustainability during	Research Centre for Animal
		the climatic change	Production and Aquaculture
		era	Rome, Italy

	Oral		
16.40-16.50 pm	presentation	Investigation of sprinkler cooling system on reducing heat stress in swamp buffalo	Thuchadaporn Chaikhun-Marcou, Obstetric-Gynecology Andrology and Animal Biotechnology Clinic, Faculty of Veterinary Medicine, Mahanakorn University of Technology, Nongchok, Bangkok, 10530, Thailand.
16.50-17.00 pm		Transforming buffalo farming in the climate change landscape of Bangladesh	S. M. Rajiur Rahman. Ph.D. National Dairy and Nutrition Expert Clean and Energy Efficient Cooling for Livestock Supply Chains in Bangladesh (Contract No: 7210554) IRG-World Bank Group, Dhaka, Bangladesh
17.00-17.10 pm		Redesigning buffalo farming practices in Bangladesh toward a sustainable milk production system	Unusing Marma Department of Medicine and Surgery, Chattogram Veterinary and Animal Sciences University (CVASU), Chattogram-4225 Bangladesh
16.00- 1730 PM	Poster presentation		

Program of day 2: 26th October, 2024

Scientific Session: Buffalo breeding and reproduction

Chair: Dr. Inderjeet Singh, Vice-Chancellor, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, Punjab, India.

- 1. Prof Dr MAM Yahia Khandoker, Department of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensingh, Bangladesh.
- 2. Dr. Mohammad Bozlur Rahman, Director Planning, Department of Livestock Services of Bangladesh, Dhaka, Bangladesh

09:00 – 09:15 am	Keynote	Improving	Professor Dr. Nasim Ahmed
	20204	Reproductive	Professor Emeritus,
	paper	Performance in Dairy	University of Veterinary and
		Buffalo: Major	Animal Sciences, Lahore,
		Constraints and	Pakistan
		Achievements	

09:15 – 09:25 am	Oral presentation	Progesterone Impregnated Intravaginal Sponge Device for Reproductive Management in Buffalo	Professor Dr. Bhuminand Devkota Department of Theriogenology, Agriculture and Forestry University, Chitwan, Nepal
09:25 – 09:35 am		Interferon-tau and pregnancy-associated glycoproteins as early markers of pregnancy in buffalo	Professor Olimpia Barbato Department of Veterinary Medicine, University of Perugia, 06100 Perugia, Italy
09:35 – 09:45 am		Time of artificial insemination after GnRH administration on reproductive performances of synchronized native buffaloes in Bangladesh	Professor Dr Mohammad Moniruzzaman Department of Animal Science, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh.
09:45 – 09:55 am		Developmental efficiency and molecular analysis of SCNT embryos reconstructed with fibroblasts derived from (non-) transgenic cloned buffalos	Dr. Chun-Yan Yang Guangxi Key Laboratory of Buffalo Genetics, Reproduction and Breeding, Guangxi Buffalo Research Institute, Chinese Academy of Agricultural Sciences, Nanning 530001, China
09:55 – 10:05 am		Genetic parameters for growth traits in Thai swamp buffaloes	Sarochita Sangjong Tropical Animal Genetic Special Research Unit, Department of Animal Science, Faculty of Agriculture, Kasetsart University, Bangkok 10900, Thailand
10:05 – 10:15 am		Genome-wide polymorphism	Dr. Meenakshi Chitkara Animal Biotechnology Division, ICAR-National

	analysis of Murrah buffalo breeding bulls	Bureau of Animal Genetic Resources, Karnal-132 001, Haryana, India
10:15 – 10:25 am	Strategic crossbreeding to enhance milk yield for sustainable buffalo production in Bangladesh	Dr. Md. Shahjahan Lal Teer Livestock Development (BD) Limited, Uthura, Bhaluka, Mymensingh 2240, Bangladesh
9.00 – 10.30 am	Poster prese	ntation
10:25 - 10:40 am	Tea Bre	ak

Scientific Session: Buffalo feeding and nutrition

Chair: Prof Dr M A Akbar, Former Vice Chancellor, Bangladesh Agricultural University, Mymensingh, Bangladesh.

Co-Chair:

technology

- 1.. Dr. Nasrin Sultana, Director (Research), Bangladesh Livestock Research Institute Savar, Bangladesh
- 2. Dr Nathu Ram Sarker, Executive Director, Krishi Gobeshona Foundation, Dhaka, Bangladesh.

10:40 – 10:55 am	Keynote paper	Alternatives to antimicrobials for ensuring gut health and augmenting performance in buffalo calves	Dr. Sachin Kumar Rumen Biotechnology Lab, Animal Nutrition Division, ICAR-National Dairy Research Institute, Karnal, Haryana-132001, India.
10:05 – 11:15 am	Oral presentation	A first methods for identification and characterization of lignin-degrading fungi discovered from water buffalo rumens	Dr. Muhammad Zahid Farooq Department of Animal Science, University of Veterinary and Animal Science (Jhang Campus) Lahore 54000, Pakistan
11:15 – 11:30 am		Protein-rich pellet starter enhance body weight gain in suckle buffalo calves	Md. Ashadul Alam Buffalo Research and Development Project, Bangladesh Livestock Research Institute, Savar, Dhaka 1341, Bangladesh.
10.30-11.30 am	Poster presentation		
Scientific Se	ession:	Buffalo pro	ducts processing

Chair: Treasurer, Asian University of Bangladesh, Dhaka and Former Dean, Faculty of Animal Husbandry, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh.

- 1. Prof Dr Md. Harun-ur-Rashid, Department of Dairy Science, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh.
- 2. Dr. A. B. M. Khaleduzzaman, Director Production, Department of Livestock Services of Bangladesh, Dhaka, Bangladesh

11:30 – 11:50 am	Keynote Paper	Water Buffalo Milk Use in Insular Southeast Asia: Cases from the Philippines and Indonesia	Dr. Takashi Tsuji International Research Centre for Intangible Cultural Heritage in the Asia-Pacific Region (IRCI), Osaka, 590- 0802, Japan
11:50 – 12:00 pm	Oral presentation	Comparative study of yield and quality, color profile, and consumer acceptability of cheddar cheese made from Holstein Friesian and buffalo milk	Tasrova Sultana Department of Dairy Science, Bangladesh Agricultural University, Mymensingh- 2202
12:00 – 12:10 pm		Effect of carrot in fortifying block type buffalo milk processed cheese	Md. Al Emam Department of Dairy Science, Bangladesh Agricultural University, Mymensingh- 2202.
12:10 – 12:20 pm		Reorganization of a traditional buffalo processing practice by the "meat seller caste" in Nepal	Dr. Kanako Nakagawa Department of Sociology, Otemon Gakuin University, 2- 1-15 Nishiai Ibaraki Osaka, 5678502 Japan.
12:20 – 12:30 pm		Buffalo milk processing and marketing in the coastal area of Bangladesh	Shmsuddin Illius Bureau-in-Charge of Chittagong, The daily Independent, Chittagong, Bangladesh
11.30 -12.30 pm 12.40 - 14.00 pm	Poster presentation Lunch and praying		
Scientific Session: Buffalo genomics and biotechnology			

Chair: Prof Dr Takashi Amano, Tokyo University of Agriculture, Tokyo, Japan Co-Chair:

- Prof Dr Yi Zhang, Key Laboratory of Animal Genetics, Breeding and Reproduction of Ministry of Agriculture and Rural Affairs, College of Animal Science and Technology, China Agricultural University, Beijing 100193, China China
- 2. DR. Anonda Kumar Adhikary, Director AI, Department of Livestock Services of Bangladesh, Dhaka, Bangladesh

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14:00 – 14:15 pm 14:15 – 14:25 pm	Keynote paper Oral	Omics for understanding reproductive performance of buffalo bulls under heat-stress Complete genomic	Dr. Ranjit Singh Kataria ICAR- National Bureau of Animal Genetic Resources, Karnal-132 001 (Haryana), India. Jingfang Si
·	presentation	landscape reveals significant differentiation of phenotype and productivity in Asian water buffaloes (Bubalus bubalis) following recent and divergent selection	Key Laboratory of Animal Genetics, Breeding and Reproduction of Ministry of Agriculture and Rural Affairs, College of Animal Science and Technology, China Agricultural University, Beijing 100193, China
14:25 – 14:35 pm		Detection of Polymorphisms in FASN, DGAT1, and PPARGC1A genes and their association with milk yield and composition traits in river buffalo of Bangladesh	Prof. Mohammad Shamsul Alam Bhuiyan Department of Animal Breeding and Genetics, Bangladesh Agricultural University, Mymensingh 2202, Bangladesh.
14:35 – 14:45 pm		Association between microsatellite markers, milk yield traits and milk composition in Murrah crossbreed buffalo	Dr. Neena Amatya Gorkhali National Animal Breeding and Genetics Research Centre, Nepal Agricultural Research Council, Nepal
14:45 – 14:55 pm		Melatonin supplementation improves the quality of inferior oocytes and somatic cloned embryonic	Dr. Prem Singh Yadav Animal Physiology and Reproduction Division, ICAR- Central Institute for Research on Buffaloes, Hisar-125001, Haryana, India.

	development by reducing oxidative stress	
14:55 – 15:05 pm	Effect of single-step commercial media on the production of zona-Free embryos (Cloned and Parthenogenetic) of buffaloes	Dr. Priyanka Singh Animal Biotechnology Division, ICAR-National Dairy Research Institute, Karnal, Haryana, India
14.00- 15.15	Poster prese	ntation
15.05 – 15.20 pm	Tea Bre	ak

Scientific Session: Buffalo health and adaptability

Chair: Professor Dr. Md. Abdul Awal, Dean, Faculty of Veterinary Science, Bangladesh Agricultural University, Mymensingh

- 1. Dr. Md. Boyjar Rahman, Director Admin, Department of Livestock Services of Bangladesh, Dhaka, Bangladesh
- 2. DR. Begam Sumsunnahar Ahmed, Director Extension, Department of Livestock Services of Bangladesh, Dhaka, Bangladesh

15:20 – 15:35 pm	Keynote paper	Optimizing buffalo health: Interplay with adaptability	Dr Praveen Malik , CEO, Agrinnovate India Limited New Delhi, India
	Oral		
15:35 – 15:45 pm	presentation	Challenges of Buffalo health in Asia: Parasitic and microbial diseases, AMR zoonosis and food safety	Md Hasanuzzaman Talukder Department of Parasitology, Bangladesh Agricultural University, Mymensingh 2202, Bangladesh
15:45 – 15:55 pm		Comparative bacteriome diversity and composition across buffalo milk chain in Bangladesh: Insights into mammary health and microbial contamination	Dr. Shuvo Singha Department of Medicine and Surgery, Chattogram Veterinary and Animal Sciences University, Chattogram, Bangladesh

15:55 – 16:05	Molecular characterization and therapeutic insights into multidrug- resistant Staphylococcus aureus strains isolated from bubaline reproductive tract	Professor Muhammad Ijaz Department of Veterinary Medicine, University of Veterinary and Animal Sciences, Lahore, Pakistan
16:05 – 16:15	Clinical evaluation of buffaloes affected with Pericarditis	Dr. Shabnam Sidhu College of Veterinary Science, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, India
16:15 – 16:25	Genetic variability of <i>Toxocara vitulorum</i> in buffaloes of Bangladesh	Dr. Hiranmoy Biswas Department of Parasitology, Bangladesh Agricultural University, Mymensingh 2202, Bangladesh
15.15-16.30 pm	Poster prese	ntation
16.25- 16.30 pm	Tea Bre	ak

Scientific Session: Buffalo management, ecology and sociology

Chair: Professor Dr. Md. Ruhul Amin, Dean, Faculty of Animal Husbandry, Bangladesh Agricultural University, Mymensingh, Bangladesh

- 1. Prof Dr Kazunobu Ikeya, National Museum of Ethnology, Osaka, Japan
- 2 Mr. Abdul Awal Mintoo, Lal Teer Livestock Development (BD) Limited Anchor Tower (6th Floor), 108 Bir Uttom C.R. Dutta Road, Dhaka-1205, Banglades

16:30 – 16:45 pm	Keynote	The diversity of	Professor Dr. Kazunobu
	paper	Buffalo breeding and	Ikeya, National Museum of
		its formative factors in Asia	Ethnology, Osaka, Japan
16:45 – 17:00 pm	Oral	Pastoralism in the	Prof. Md. Omar Faruque
•	presentation	management of	Department of Animal
	P	indigenous dairy buffaloes of	Breeding and Genetics,
		Bangladesh	Bangladesh Agricultural
		Dungladesii	University, Mymensingh,
			Bangladesh

17:00 – 17:10 pm	New technologies and digitalization in buffalo farming	Dr. Victoria Barile Research Centre for Animal Production and Aquaculture Rome, Italy
17:10 – 17:20 pm	Farmers' Access to livestock extension services in India: evidences from household Survey	Dr. Aiswarya Transfer of Technology Unit, ICAR-CIRB, Hisar, India
17:20 – 17:30 pm	Agro-pastoral animal husbandry of buffalo: from settled rearing to transhumance in case of Nepalese mountain villages.	Dr. Kazuyuki Watanabe Hannan University, Japan
17:30 – 17:40 pm	Buffalo production improvement attributes in reducing poverty at Bhola coastal area in Bangladesh	Md. Murshed Hasan Mustafa Department of Animal Science, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh.
17:40 – 17:50pm	Buffalo Family farming in Canada	Mr. Henry John Koskamp, Koskamp Family Farms Ltd. 4701 Line 29 Stratford, ON. N5A 6S4 Canada
16.30-17.50 pm	Poster prese	ntation

Program of day 3: 27th October, 2024

Session for Country Report

Chair:

Professor Antonio Borghese, Secretary General, International Buffalo Federation, Italy Co-Chair:

Professor Nasim Ahmed, Professor Emeritus, University of Veterinary and Animal Sciences, Lahore, Pakistan

Dr. Tirtha Kumar Datta, Director. ICAR-Central Institute for Research on Buffaloes, Hisar, Haryana, India, India

Time	Program	Resource person
09:00 – 09:10 am	Buffaloes in Pakistan: Keystone of Agricultural Economy and Pathway to Sustainable Growth	Professor Talat Naseer Pasha et al Director General, Punjab Agriculture, Food and Drug authority, Lahore, Pakistan
09:10 – 09:20 am	Present status of buffalo in India and Future trends	Dr. Ashok kumar et al Principal Scientist, Animal Physiology Division, ICAR- CIRB, Hisar, Haryana, India
09:20 – 09:30 am	Present Status of Buffalo in Nepal and Future Prospects	Dr. Neena Amatya Gorkhali et al Director, National Animal Science Research Institute, Nepal Agricultural Research Council, Khumaltar, Lalitpur, Nepal
09:30 – 09:40 am	Present Status of Buffalo in Bangladesh and Future Prospects	Prof. Dr. Md. Ruhul Amin et al Professor, Department of Animal Science, Bangladesh Agricultural University, Mymensingh, Bangladesh
09:40 – 09:50 am	Present Status of Buffalo in Thailand and Future Prospects	Professor Dr. Skorn Koonawootrittriron et al, Department of Animal Science, Faculty of Agriculture, Kasetsart University, Bangkok 10900, Thailand
09:50 – 10.00 am	Present status of buffalo in China and future prospects	Professor Chengjian Yang et al, Guangxi Buffalo Research Institute, Nanning, 530001, China
10:00 – 10:10 am	The status, challenges, and development of buffalo production in Laos	Dr. Vongpasith Chanthakhoun Vice President of Souphanoouvong University, Laung Prabang Province, Laos
10:10 – 10:20 am	Current Status of Buffalo Production in Cambodia	Mr. Youkheng Khy et al Deputy Director of Animal Production, Department of Animal Health and

		Production, Phnom Penh, Cambodia
10.20- 10.30 am	Tea Break	

Asian Buffalo Association Assembly (Only for members)

Chair: Professor Dr. Md. Omar Faruque, President, Asian Buffalo Association **Co-Chair:**

Dr. Inderjeet Singh, Vice President, Asian Buffalo Association

Dr. Buminand Devkota, Immediate past president, Asian Buffalo Association

Moderator

Dr. Ashok Kumar, Secretary, Asian Buffalo Association

10.30-11.00 pm	Topics to be decided during	Members only
	congress	
	Recommendation of the congress	

Prize distribution and closing ceremony

Chair: Professor Dr. Md. Omar Faruque, President, Asian Buffalo Association

Chief guest: Nilufa Akter, Additional Secretary, MoFL, Dhaka, Bangladesh **Special guest:**

- 1.Dr. Farukul Islam, General Manager, BRAC Artificial Insemination Enterprise, BRAC Centre, 75 Mohakhali, Dhaka -1212, Bangladesh
- 2. Mr. Zakir Hossain Mohin, Grameen Jano Unnayan Sangtha, Altajer Rahman Road, Charnoabad, Bhola

Mediator: Dr. Hiranmoy Biswas, Secretary, Organizing Committee

11.00 -11.30 pm	Prize distribution
11.30- 12.30 pm	Speech of Special guests Speech of Chief guest Speech of special guests Votes of Thanks by Dr. Ashok Kumar, Secretary, Asian Buffalo Association Closing by Professor Dr. Md. Omar Faruque, President, Asian Buffalo Association
12.30 – 14.00 pm	Lunch and praying
14.00 – 17.00 pm	Visit of BLRI and DLS Establishments, Visit of national monument

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Dr. Hironmoy Biswas

Secretary, Local Organizing Committee 11th Asian Buffalo Congress 2024, Dhaka

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