

## International Poultry Show & Seminar 2017



### **Venue: International Convention City, Bashundhara, Dhaka**

Date: 2 to 4 March, 2017



#### Message



Ministry of Agriculture Govt. of the People's Republic of Bangladesh

In this very month of Independence, I'm proud to offer my humble respecet and submission to the Father of the Nation Bangabandhu Sheikh Mujibur Rahman. I recall, with great respect, the 30 lakh martyrs, and the 2 lakh women/mothers and sisters, the sacrifices made by the martyrs, and the unforgettable contribution of the freedom fighters, with which we acquired an independent and sovereign Bangladesh in 1971.

I'm pleased to learn that World's Poultry Science Association-Bangladesh Branch is going to organize 03 (three) day International Poultry Show and Seminar. The theme chosen for the conference is Poultry for Better Tomorrow.

The present agriculture friendly government under the dynamic leadership of Hon'ble Prime Minister Sheikh Hasina has already given special priority in agriculture sector as well as Fisheries and Livestock and has taken step to make agricultural more profitable for the farmers.

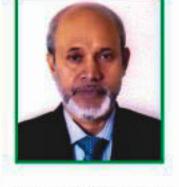
Livestock is fundamental to the livelihoods of about one billion of the world's poorest people. The poultry sector is possibly the fastest growing and most flexible of all livestock sectors. Driven primarily by very strong demand, it has expanded, consolidated and globalized over the past 15 years in countries of all income levels. For Bangladesh, poultry, in particular, is essential for the livelihood of many poor farmers often being the only asset they could possess. It Significantly contributes to

improve human nutrition, provide food (eggs and meat) with high quality nutrients, generate a small income and savings, especially for women, thus enhancing the capacity to cope with shocks and reducing economic vulnerability; provide manure for vegetable garden and crop production. Beyond its economic or nutritional importance, poultry is also widely recognized. I

am confident that this conference will come up with important recommendations related to the theme how poultry could contribute for betterment of Bangladesh. I congratulate the organizers for providing a platform for this interaction through this Conference. I Have no doubt that the suggestions made by the speakers will be well taken and implemented by the concerned authorities. I wish the Conference a great success.

Joy Bangla, Joy Bangabandhu, Long Live Bangladeshi

Matia Chowshury Matia Chowdhury M.P



#### Message



**Director General** Department of Livestock Services (DLS) Govt. of the People's Republic of Bangladesh

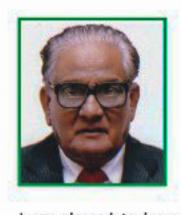
I am pleased to learn that Worlds' Poultry S.cience Association-Bangladesh Branch is organizing the 10th international Poultry Show and Seminar-2017. Theme paper of the seminar and show is selected as 'Poultry for Better Tomorrow'.

It has been well recognized that Livestock sector has been cruciaHy important for the overall development Bangladesh economy and has the great potential to contribute more. Almost 90o/o of animal protein in our diet comes from fish & livestock. Therefore, the main thrust of the Department of Livestock Services is to make optimum use of the livestock resources towards fulfilling the requirement of animal protein for the country through proper management and planned development.

Most importantly, the Poultry sub-sector has also been playing a key role to poverty alleviation through employment generation. Unfortunately, few years back avian influenza outbreaks negatively impacted the growth of poultry industry and the seminar will provide the platform for the Scientists and entrepreneurs and other stakeholders of the poultry industry to understand the challenges and opportunities better and seize the best out of it through sharing experiences, studies, and

The Department of Livestock Services is fully committed to extend all possible support for the development of Poultry Sector.





#### Message



Ministry of Fisheries & Livestock Govt. of the People's Republic of Bangladesh



This show and seminar will bring the farm owners, scientists, educationists and entrepreneurs closer and their interactions will provide further momentum towards Sustainable growth of the industry. The WPSA Bangladesh Branch certainly deserves Thanks for organizing this seminar and show for the last

Our government has taken many initiatives to protect the industry in the last few years Like providing compensation to AI affected farm, joint program with World Health Organization to monitor AI affected farms and giving permission for AI vaccination in selected areas. These measures, specially the decision to vaccinate poultry birds to protect the poultry industry from avian influenza virus will have long lasting impact in the industry.

Undoubtedly Poultry sector is playing a pivotal role in employment generation, poverty alleviation and revitalizing rural economy.

I believe that this congregation of national and international scientists and industry experts will be immensely helpful to all concerned for finding out the solution of prevailing problems in Poultry Industry.

I hope that 10th international show and seminar will be successful in creating inspiration among all stakeholders of poultry industry.

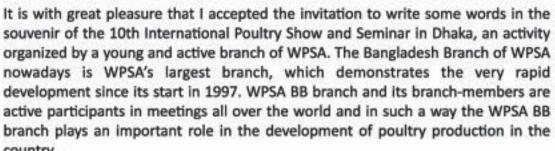
Joy Bangla, Joy Bangabandhu, May Bangladesh Stay forever. Muhammed Sayedul Hoque, MP



Message



Secretary General World's Poultry Science Association



During this meeting, for the first time in the new International Convention Centre Bashundhara, Dhaka, keynote and state-of-the-art lectures and oral presentations will form the forum for information dissemination. During three days all aspects of poultry production will be covered. Important subjects are disease control, nutrition, genetics, antimicrobial resistance and the use of alternative products to replace antimicrobials, all related to broiler, layer and duck production. The meeting therefore is the place to be for all involved in poultry science, offering a

bridge between academia and industry. WPSA BB branch has already for years been successful in organizing International Poultry Show and Seminar and the exhibition is growing every edition. Good contacts with industry will help to develop branch activities and we are grateful to

the industry for their continuous support. I look forward to successful, productive and enjoyable meeting.

Dr. Roel Mulder

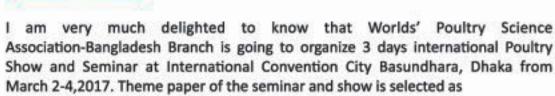


'Poultry for Better Tomorrow'.

Message



Ministry of Fisheries & Livestock Govt. of the People's Republic of Bangladesh



In last half century, significant increases in the productivity of modern poultry stocks have been achieved for both meat and the egg production sectors of the global poultry industry which really indicates betterment could be achieved through Poultry.

We could consider Poultry as an effective tool to alleviate poverty from Bangladesh that's how looking for a better tomorrow of our country. Through poultry farming individual can generate income within shortest possible of time.

Several factors have contributed to the consistent growth in Bangladesh poultry production, Including: genetic progress in poultry starins for meat and egg production; better4 understanding of the fundamentals of nutrition; disease control etc, For example, the egg for a meat chicken to reach the market weight of 1.5-1.8 kg has steadily decreased from 40 days in 1990 to 30 days in 2017, and the efficiency of converting feed into poultry products also continues to improve. This growth in poultry production is having a profound effect on the cost effectiveness of quality protein. No other quality protein is available with such an economic price. Poultry is now ensuring protein for our poor people as well. That is why per capita animal protein consumption increased a lot. That's how poultry is contributing to build a healthy nation.

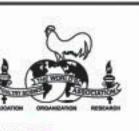
Last of all I want to congratulate WPSA-BB for their continuous effort for holding such a big Seminar. I wish every success of the program

Joy Bangla, Joy Bangabandhu, May Bangladesh Stay forever.

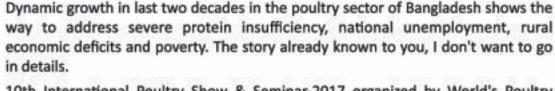




Message



Chief Convener 10th International Poultry Show & Seminar-2017 World's Poultry Science Association-Bangladesh Branch.



10th International Poultry Show & Seminar-2017 organized by World's Poultry Science Association-Bangladesh Branch is in full swing. The objective of this 3 days program is very simple - to showcasing the new and scientific poultry farming at the doorstep of our farmers, workers, new and existing entrepreneurs and who are interested to the state of the art & advanced poultry farming know-how.

World's Poultry Science Association-Bangladesh Branch (WPSA-BB) is playing a major role for scientific advancement of the poultry sector of Bangladesh since its inception. The eventful journey that the sector has become what it is today transformed into a thriving industry from backyard farming in short span of time to meet the hurdles and challenges WPSA-BB's role in advocacy & support that has guided the sector over time.

Our poultry will be going to a new height despite adversities; the sector is working hard with a wider vision to achieve the international standard.

We welcome all of our good wishers, national policy makers, financiers, friends, associates, Medias, partners to have a glimpse of the event - how we nourish, culture and hold the dream of millions for quality poultry for a better Bangladesh. No word suffice to praise the contributions of my fellow brothers and sisters who were diligent, in silence but always smiling for making this event a great success rest is yours. Thank You,

**Moshiur Rahman** 



Message



Ministry of Fisheries & Livestock Govt. of the People's Republic of Bangladesh

It is my pleasure to learn that the World Poultry Science Association, Bangladesh Branch is going to organize 10th International Poultry Show and Seminar-2017. This show and seminar would definitely be of much benefit to the all stakeholders of the poultry industry.

The role of livestock sector in the development of agro-based economy of Bangladesh is very important and promising. The livestock sector is the major supplier of our animal protein, where the poultry sector comprises a significant share of livestock. At present, poultry sector is playing a key role in the employment generation and poverty alleviatyion along with meeting the need of animal protein. However, sudden outbreak of avian influenza in a few years back on the poultry industry affected the growth and profitability of this segment. I do believe that this bridging of scientists and entrepreneurs of the industry will be a supportive platform to find out the prevailing tribulations and their elucidation. The Ministry of Fisheries and Livestock is also committed to extend all out support for the development and growth of the poultry sector.

I wish grand success of the 10th International Show and Seminar, 2017 and also wish continuous growth and success of the stakeholders of the poultry industry.





Message



World's Poultry Science Association-BB

Poultry meat and eggs are rich in protein and micronutrients and are essential to promote growth and to shape a healthy human body. The industry has helped to raise rural income and women's employment and significantly reduce the income inequality of the country. All reports indicate that a revolution in the poultry industry is imminent with the focus mainly on the modernization of animal agriculture and capitalization of existing domestic competitive advantages.

This year, in the 10th International Poultry Show & Seminar 2017, the academicians and researchers of WPSA-BB, along with their foreign counterparts, have provided us with an immense collection of data and research materials with which we can hopefully take nutrition security to the next level. We are much obliged to them for their hard work and dedication to help us reach the pinnacle of poultry farming in Bangladesh and trust that they will continue to awe us with such great performance in the years to come. As such, WPSA-BB is organizing the largest poultry event ever held in the Indian subcontinent. In this event, around 500 stalls will exhibit plans to upgrade the industry. Approximately 100 research papers, covering topics such as husbandry management, health management, nutrition, and processing technologies, will be presented to offer new ideas, concepts, interpretations, and solutions. For the first time ever, these papers will be presented in multiple halls simultaneously. The audience, especially the students, researchers, stakeholders, government officials, journalists, and consumers of the poultry products, will be glad that they seized this opportunity to gain valuable insight into the poultry world as this will truly be a unique experience for everyone present.

I personally want to thank all the guests who have travelled here to attend this seminar from the different parts of the globe. We appreciate your enthusiasm and effort to help us feed the poor and underprivileged people of Bangladesh and improve the capacity and competency of our micro farmers as well as food safety. We hope that you find our event to your liking and join us in our further expeditions to make this world a better place.

Thank You

**Shamsul Arefin Khaled** 

#### **NUTRITIONAL VALUE OF CHICKEN MEAT, ITS VERSATILE USES AND POTENTIALITY**

#### Introduction:

According to the UN Food and Agriculture Organization (FAO) and World Health Organization (WHO) guidelines, 60% of the energy requirements of human should come from grains/cereals (rice, wheat, pulses, maize, etc.) and 10-15% should come from protein sources. Among the protein sources, at least 20% or 15 g of protein should come from animal sources. In many developed countries at around 50% of protein comes from animal sources. It depends on several important factors, like income, nutrition awareness and feeding habits etc. In Bangladesh, daily average consumption of egg and chicken meat is 7 and 14 g/head respectively and protein retention from those are 1 and 3 g respectively. Therefore, 4 g protein comes from egg and chicken meat daily. If we consider the other sources of animal protein like fish and meat from animal it will not exceed 5-6 g /head.

The population of our country is much higher than the proportion of land area. Moreover, the population is increasing at a rate of 1.4% and at the same time the arable land is decreasing at the rate of 1% per year. The prevalent lack of animal protein is a big challenge in our country. In that case, chicken rearing is relatively easy with minimum capital compared to fish and milk production with small capital and limited area of land. Poultry sectors can quickly and easily play a leading role to curb the shortage of animal protein in Bangladesh. Only 114 grams (4 ounces) chicken meat can fulfill the 70 % needs of daily requirement. The fat content is higher in animal protein. Those who like to consume meat; they can easily take chicken meat instead of beef and mutton. Because of the saturated fat content is lower in chicken meat compared to other meat. Again, if we remove the skin from chicken carcass, then the fat content will be half. If we plan in limited areas of farms and farmers' houses, it could be able to meet the demand of animal protein, including poverty alleviation and

strengthening the country's economy. Thus, chicken rearing

would be an important tool to achieve food and nutrition security.

#### Nutritional value of chicken meat:

Chicken meat is the only meat, which has no restriction over religion or ethnic group. Chicken is usually available and inexpensive of all domestic livestock meats. The production cost of broiler is the lowest over all animal protein, therefore, the cheapest animal protein source. It has high nutritional value. Poultry foods are usually without taboos and can be consumed by a family in a single sitting. A comparison of chicken meat with other meats shows that it is a healthy meat. All activities from slaughter to cook are very easy and quick to serve. In addition, chickens are used in preparation of variety of delicious food items and have multi-purpose uses.

Chicken meat is the high quality nutrient reservoir. People of all ages can safely eat chicken meat, because it has less fat and calories. It is low in total fat and in the undesirable trans fats, but high in the desirable monounsaturated fats. Breast meat of broilers is 100 % white meat which means the amount of fat is very low. Usually, animal protein based food contains more fat. Chicken meat contains higher amount of protein, vitamins, minerals, and a small amount of fat, which is highly beneficial for the human body.

#### Chicken meat, protein and amino acids

Amino acids play an important role on human growth, development, maintenance and other physical activities. Almost all amino acids are found in chicken meat, so chicken meat is considered as an important animal protein. Chicken meat is also very important for mental development. In addition, this protein is used to produce enzyme in the body which plays an important role in the process of digestion and metabolism of food in human. The amount of protein from 100 g chicken meat can fulfill more than 50% of daily requirement.

#### Minerals of chicken meat

Chicken meat has a variety of minerals such as calcium, phosphorus, iron, zinc, magnesium and selenium which give a boost to the immune system. Usually boiled chicken in pepper soup is also good for fighting off cold. Chicken meat has calcium which along with phosphorus keeps our teeth and bones healthy, calcium is very necessary to remove the weakness of teeth and bone. The phosphorus content of chicken meat has important role to ensure healthy functioning of the kidneys, liver and the central nervous system. Iron helps transportation of oxygen to cells and cell growth. Chicken meat has zinc which helps to maintain a healthy appetite and taste. So, a bowl of steaming chicken soup can change the taste of our mouth. Moreover, zinc plays a vital role on DNA synthesis and the activities of immune system. Chicken has special health benefits for men. This is because zinc in chicken helps to regulate the testosterone (male hormone) levels. Chicken meat has magnesium that can help women coping with premenstrual stress. The magnesium levels in women's blood reduce just before they have period. So, women can compensate by having some blanched chicken. The trace mineral selenium is found in good quantities in chicken meat. It is an essential component required by many major metabolic pathways, which includes thyroid hormone metabolism, anti-oxidant defense systems, and immune function of the body. This selenium also cuts the risk of developing arthritis at later stages of life.

#### Vitamins of chicken meat

There are plenty of vitamins in chicken meat that plays an important role in protecting the human body. Chicken liver is a good source of vitamin-A, thiamin, riboflavin, niacin and vitamin-C. Chicken is a rich source of vitamin B-Complex and that protects the body against cancer. A deficiency of niacin can be directly associated with genetic (DNA) damage. Niacin also helps in metabolism and keeps lower cholesterol in human body. Around 72% of the daily niacin requirement of the body has vitamin B5 or pantothenic acid which has a calming effect on the nerves. So, if we are stressed out, nothing like grilled chicken to chill out.

can be fulfilled by a four-ounce serving of chicken meat. Chicken

#### Versatile uses of chicken meat and its potentiality: Chickens or broiler rearing is the best way to establish a farm

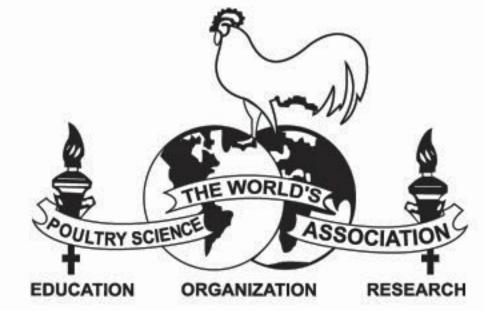
with minimum capital. In any agricultural sector, the capital does not come back in such a short time (4 to 5 weeks). One can free himself from unemployment by this business through investing Taka 25 to 30 thousand only with a small area of land. However, this industry has more bright future considering the nutritional aspects. Nowadays, 40 - 45 percent of total meat demand of Bangladesh is coming from this industry. Daily production of chicken meat is currently around 1700 metric tons in the country. In 2015, Bangladesh Poultry Industries Coordination Committee (BPICC) organized a workshop and provided the information that by the year 2021, the daily requirement will be 3.5 to 4 thousand metric tons of chicken meat in Bangladesh. So, it will require to invest huge money. To ensure that the government-private co-operations need to be increased, again government should also be focused more on this sector.

#### Conclusion:

According to various sources, the current market size of frozen food is around Tk 400 crore. The market is expanding in the form of an average 30 percent every year. With the hope of taking advantage of the new possibilities Bangladesh is dreaming to produce 100 crore broilers by the year 2021. This dream will be successful if we all can work together. In addition, soft loan for farmers, introduction of poultry insurance and implementation of national poultry policy would be needed for this dream to come true.

Prof. Dr. Md. Shawkat Ali, Dept. of Poultry Science

Bangladesh Agricultural University, Mymensingh.



### Organized by:

# World's Poultry Science Association-Bangladesh Branch























