

## HOT WEATHER IN THE DEVELOPMENT OF POULTRY

**Mahmudov Farxod Bahodir o'g'li**

*TerDMAU student*

[farxodmaxmudov@gmail.com](mailto:farxodmaxmudov@gmail.com)

Phone number: +998 93 215 53 06

**Annotation:** this article covers the importance of poultry farming in agriculture, its role in ensuring food safety and the development characteristics of modern poultry industries.

**Keywords:** poultry, food safety, hot climate, poultry factory, productivity.

Poultry farming is one of the important branches of Agriculture and has occupied a special place in ensuring food security in humanity since ancient times. To date, modern poultry farming is one of the areas with high economic efficiency, along with the production of high-quality meat and egg products. There are many external factors that influence the development of poultry. Including Will directly depend on weather conditions. Hot climate conditions significantly affect the growth, productivity, and health of poultry. Poultry is the fastest maturing dietary bop food, rich in proteins and essential amino acids. Poultry meat and eggs are characterized by light digestion, richness in protein, high biological value, and low cost compared to other types of animal meat. Therefore, poultry farming in many countries is one of the main sources of satisfying the population's need for protein. The poultry industry also serves as a stable source of income for small farms and large industrial enterprises. The poultry industry is also well developed in our country. In factories, the production process is mechanized. Each poultry farm consists of breeding (male and female) and egg-laying birds, chick hatching (incubation) departments, as well as egg and meat production and waste processing facilities. Chickens on poultry farms are kept in special cages; to prevent feed from becoming contaminated, feeders and drinkers are placed outside the cages on attached troughs. Special devices in the facility regulate temperature, humidity, and day length. In winter, the building is artificially illuminated; when the days become longer, hens lay more eggs. Chicks are hatched in special incubators. The growth and productivity of poultry largely depend on environmental conditions, particularly the weather. A hot

climate or summer season creates certain advantages as well as difficulties for poultry farming. In hot weather, birds slightly reduce feed intake and increase their demand for water. This is a physiological response aimed at maintaining heat exchange and thermoregulation in their bodies. When the temperature rises above 30°C, the respiratory rate of birds increases, which helps lower their body temperature. At the same time, in hot weather it is necessary to create a comfortable microclimate for poultry, meaning a well-established ventilation system and adequate water supply. One of the positive aspects of hot weather is the abundance of natural light and the wider opportunities for birds to walk in open spaces, which can improve their overall health and productivity. However, in excessively hot conditions, heat stress may occur, leading to reduced growth rates, a decline in egg production, and sometimes even mortality. Therefore, in hot weather, it is important to follow biosecurity rules, control the microclimate in poultry houses, and take measures to protect birds from heat stress. Figure 1.



## CONCLUSION

Weather conditions, particularly hot climates, play an important role in the successful rearing of poultry. Proper management of hot weather increases the efficiency of poultry farming, improves product quality, and generates economic benefits. Therefore, creating a comfortable microclimate for poultry, preventing heat stress, and implementing scientifically based measures for proper care are of great importance for the sustainable development of the poultry industry.

## REFERENCES

1. Abdukarimov A., Xolmatov H. Fundamentals of Poultry Farming. – Tashkent: Uzbekistan Publishing House, 2019. – 220 p.
2. Yusupov A., Rakhmatullayev O. Physiology of Farm Animals. – Tashkent: Fan, 2020. – 310 p.
3. Sobirov B., Karimov M. Feeding and Caring in Poultry Farming. – Samarkand: Zarafshon, 2021. – 185 p.
4. Ministry of Agriculture of the Republic of Uzbekistan. Methodological Guide on Biosecurity in Poultry Farming. – Tashkent, 2022. – 75 p.
5. Jo‘rayev N. Hygiene and Care of Farm Animals. – Tashkent: Science and Technology, 2018. – 260 p.
6. Rasulov A. Fundamentals of Veterinary Hygiene and Sanitation. – Tashkent: Teacher, 2017. – 300 p.
7. Mavlonov O. Biology (Zoology). "National Encyclopedia of Uzbekistan" State Scientific Publishing House. – Tashkent, 2017. – 166 p.