

Climate change series

Focus on poultry

Poultry flocks are particularly vulnerable to climate change because birds can only tolerate narrow temperature ranges. Poultry farmers need to consider making adaptations now to help reduce cost, risk and concern in the future.

CLIMATE CHANGE OPPORTUNITIES FOR POULTRY FARMERS

Savings

- Winter energy costs may reduce as warmer winters reduce the need to heat buildings and flocks can be acclimatised outside
- Locally grown soya and maize reduce feed costs and reduce poultry food miles
- Meat products may increase in price and with feed prices possibly decreasing (due to the potential for soya yield to increase by 10% as a result of rising CO₂ levels) poultry farming may become more profitable

CLIMATE CHANGE CHALLENGES FOR POULTRY FARMERS

Productivity

- Housing systems need to be managed to maintain optimal seasonal temperatures and reduce the risk of heat stress
- Increased investment in ventilation and cooling systems
- Decreased reproductive capacity (Defra studies on broiler hens found that a poultry house put under a future climate change scenario exceeded critical temperature on 30% more occasions, despite a 10% increase in ventilation)
- More dramatic events such as storms increase stress and may affect productivity





ADAPTATION SUGGESTIONS FOR POULTRY FARMERS

- Reconsider building design in new builds to more effectively cope with new climate and weather extremes
- Install more/new equipment to cope with new climate extremes

MITIGATION MEASURES FOR POULTRY FARMERS

- Install renewable energy (such as solar or wind power) to power poultry sheds
- Consider utilising biomass boilers or anaerobic digestion of poultry litter

Please refer to [fact sheet 4 for further mitigation measures](#).

Although some of the impacts might happen to a greater or lesser extent in the short, medium or longer term, it's important to think ahead for the future, especially in relation to issues such as building design.

Costs

- Increased energy costs to cool buildings in summer
- Stocking density may need to be reduced in extreme temperatures, potentially increasing costs
- Actively controlled ventilation could become essential in transportation
- Increasing need for ventilation to reduce housing humidity
- Building infrastructure and maintenance to cope with more intense weather events and increased rainfall. Building plans should consider more sustainable building methods, with greater investment in drainage systems to accommodate more extreme and frequent floods and frequent rainfall

FARMING
FUTURES

For news, events, and links to stories about how other farmers are managing climate change on their farms, please visit: www.farmingfutures.org.uk

With thanks to: AHRF, AIC, BBRO, BPEX, DairyCo, Carbon Trust, CLA, Defra, EBLEX, Forum for the Future, HDC, HGCA, NFU, PGRO, Potato Council, and UKCIP