# **Animal-based Foods**

Sustainability Insights





# **Product Description**

Animal-based Foods include food products made primarily from a single animal-based ingredient (dairy, meat, or eggs). Product types include dairy, meat, eggs, ice cream, lard, and gelatin.

# Mission

The mission of The Sustainability Consortium (TSC) is to improve the sustainability of products when they are made, purchased, and used, with a focus on manufacturers and the retail buyers who decide what products to carry in stores. The information in this document is drawn from our detailed research on known and potential social and environmental impacts across product life cycles. TSC acknowledges that other issues exist, but we have included here those that are most relevant to the decision making of retail buying teams and manufacturers. The topics are listed alphabetically for ease of reading; the order does not represent prioritization or other criteria.

## **Sustainability Insights**

# Animals

## **Animal welfare**

Final product manufacturers should source from animal product suppliers with comprehensive management plans, including implementing best practices and certification or assessment programs, that ensure animal welfare for farm animals. Plans or programs should include practices that avoid painful procedures; ensure access to adequate housing and proper nutrition; require proper handling, proper transportation and humane slaughter methods; and promote good health in ways that are appropriate for the animal ingredient used.

# Managing the Supply Chain

## Antibiotics

Therapeutic use of antibiotics has been shown to have positive effects on animal health and welfare, but care should be taken to prevent antibiotic resistance. To ensure responsible use, animal farm operations should follow label instructions exactly. Producers should also consult veterinarians to implement antibiotic monitoring programs, plans, and systems, to optimize animal welfare and health while minimizing antibiotic resistance in animals and humans, as well as impact on the environment.

#### Deforestation

Clearing land for feed production can lead to deforestation. Final product manufacturers should use sourcing policies that monitor progress on zero deforestation commitments. Sourcing policies should also promote protection of high conservation value forest habitats, which have unique plants and animals. This reduces the risk of biodiversity loss, diminished ecosystem quality, and increased greenhouse gas emissions that can occur when forests are cleared for feed production.

## **Fertilizer and Nutrients**

Improper management and use of fertilizers can lead to local water pollution and release greenhouse gases. Feed producers and animal farm operations should use a nutrient management plan to improve the efficiency of fertilizer and manure use for feed production and use precision agriculture, which applies only the amount of fertilizer needed. Where appropriate, feed producers and animal farm operations could plant vegetative buffer zones around streams to help prevent water pollution via nutrient runoff.

## Pollution

Manure releases greenhouse gases and other emissions that pollute air and water. Animal farm operations can use technologies in animal husbandry that clean the pollution out of the air and manure management plans to reduce impacts from manure.

#### **Supply Chain Transparency**

Addressing many of the environmental and social challenges within an animal product supply chain requires cooperation among companies at different stages of the supply chain. Final product manufacturers should determine the locations of animal farm operations that produce their animal product supply and engage in initiatives that improve transparency, communication, and data sharing.

## Use of Resources

#### **Climate and Energy**

Final product manufacturing, animal-based ingredient processing, animal farm operations, and feed production all require significant amounts of energy leading to greenhouse gas emissions. Fertilizers and transportation vehicles can also emit these gases. Animal farm operations, animal-based ingredient processors, and final product manufacturers can reduce these impacts by measuring and tracking energy use, performing preventative maintenance on equipment, and replacing inefficient equipment. Additionally, animal farm operations can minimize impacts associated with feed production by sourcing feed from suppliers who implement a nutrient management plan, use precision agriculture to apply fertilizers, and use low-energy irrigation systems. Animal farm operations can also optimize feed yield and feeding of animals and the size and efficiency of farm vehicles.

#### Water

Feed production for animal-based ingredients can use a significant amount of water and contribute to freshwater depletion, which is problematic in water-stressed regions. Animal farm operations can measure and track water use, and use methods such as precision agriculture, which applies only the amount of water needed, or irrigation water management to improve water efficiency.

## Workers and Communities

#### **Workers**

Workers may face unfair pay, discrimination, and limited freedoms. They may also be exposed to dust, chemicals, or other industrial hazards. To help ensure worker health and safety, final product manufacturers should have a documented health and safety management plan, including a chemical management plan where needed, and provide safety training and personal protective equipment to workers in their facilities. Final product manufacturers should procure animal-based ingredients from suppliers that transparently address worker health and safety and labor rights at animal farm operations and during ingredient processing and perform audits when needed.





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