



Introduction

Providing cows with access to the outdoors, allowing them to move freely and ensuring cow comfort, is a concept that fits well with current trends in farm animal welfare. Increased public awareness and consumer expectations of the treatment of animals are of great importance here.

Main concepts

① **Freedom of movement.** Provide cows with more space. Access to outdoor areas or paddocks enable cows to engage in natural behaviours such as walking, grooming and social behaviour.



② **Natural ventilation.** The use of open sides, ridge vents or other architectural features improves air quality and reduces the risk of respiratory diseases often associated with enclosed spaces.



③ **Exposure to sunlight.** Provide cows with access to sunlight to promote *vitamin D* synthesis, aiding the absorption and utilization of key nutrients such as calcium and phosphorus.



④ **Social behaviour.** More space with access to outdoor areas or paddocks reduce aggression and increase positive social interactions among cows. Positive social interactions provide social support, reduce stress levels and improved cow welfare.



⑤ **Enrichment.** Barns with outdoor access encourages environmental enrichment, such as raised resting platforms to increase cow comfort and brushes for grooming.

Act in accordance with animal welfare principles - The Five Freedoms

- Freedom from hunger and thirst
- Freedom from discomfort
- Freedom from pain, injury or illness
- Freedom to express natural behaviours
- Freedom from fear and anxiety

Benefits

- Improved cow welfare and general health
- Freedom of movement
- Reduced respiratory problems and disease transmission
- Increased vitamin D synthesis
- Lower stress levels
- Potential for improved milk quality



Potential issues

- Challenges of managing outdoor access during extreme weather conditions
- Additional infrastructure needed, e.g. water access and well managed walking tracks
- Need for careful grazing management and rotation to prevent soil degradation
- Potential risk of predator attacks and biosecurity concerns
- Need for parasite control

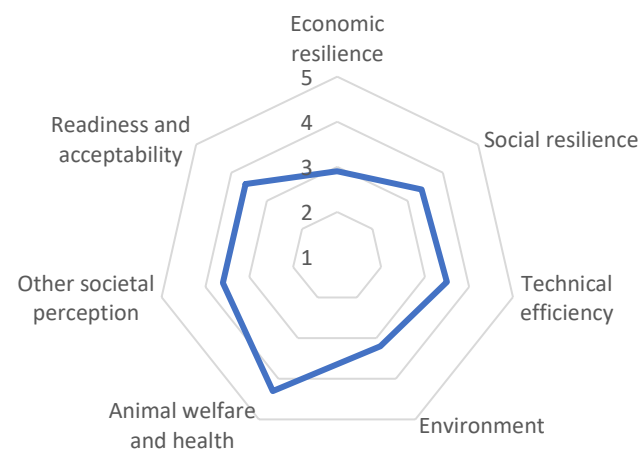


Technical solutions

There are several technical solutions available for barns with outdoor access. Here are a few:

- **Sliding doors:** Barn doors that can be easily opened or closed, providing animals with access to the outdoors when desired.
- **Dutch doors:** Doors divided into two halves, with the top half able to remain open for ventilation and sunlight while keeping the bottom half closed for animal safety.
- **Fencing and gating:** Secure perimeter fences and gates around the barn to create a safe outdoor area for animals.
- **Covered runways:** Roofed walkways attached to the barn, offering outdoor access while protecting animals from harsh weather conditions.
- **Pasture rotation systems:** Dividing the outdoor space into sections and rotating animals periodically for natural grazing patterns and soil management.
- **Automatic feeding and watering stations:** Systems that automatically dispense food and water to animals in the outdoor area.
- **Sheltered resting areas:** Designated areas in the outdoor space where animals can seek shelter from the elements.

Application assessment



Advice from other farmers:

“... Make sure that a barn with outside access provides the cows with enough space to move freely. Crowding can lead to stress and health problems....”

