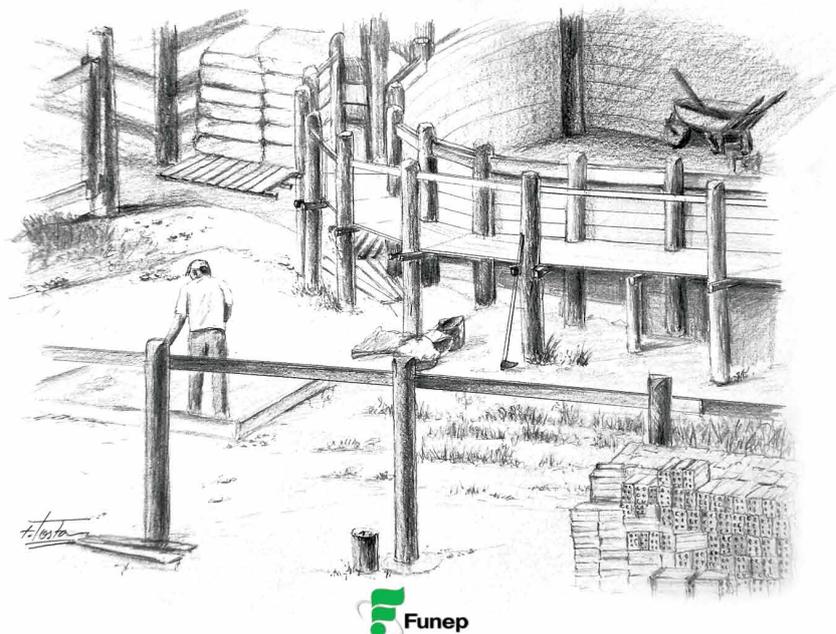


# Best Practices of Handling CORRAL

## PROJECT AND CONSTRUCTION



Murilo Henrique Quintiliano - Adriano Gomes Páscoa - Mateus J. R. Paranhos da Costa

The term corral is used to name facilities for livestock handling, among other things. The corral for cattle handling is formed by the combination of several structures that must be dimensioned and distributed in space to facilitate cattle handling. Most of a corral is occupied by structures that suit for holding and sorting cattle. There are also other structures that are used for driving, restraining, and loading cattle. Poorly designed corrals, with construction problems or maintenance failures cause handling difficulties and increase the risks of stress, accidents, and productive losses. On the other hand, a well designed and built corral, based on the understanding of cattle behavior, reduce these problems. To implement the best practices of handling, it is not always necessary to build a new corral, most of the times facilities adaptations are enough to improve handling efficiency and reduce the risks.



# Corral: Project and construction - step-by-step

1. Before starting the construction of a corral, plan the position of the structures, considering the sun angle to reduce contrasts between light and dark.
2. When necessary, use transparent roofing tiles or artificial lighting to avoid dark areas or shadows.
3. Avoid building structures with sharp corners. Wherever possible use round shapes, eliminating or softening the corners.
4. Build the corral in an easily accessible location on a well-drained and sloped ground that facilitates water flow without risk of erosion. Avoid places with rocky outcrops.
5. Dimension the corral according to the handling needs; do not use the structures of the corral to keep the cattle confined.
6. Build paddocks around the corral, which must have good forage availability, good quality water, feed trough for supplementation, and shade.
7. Make alternate use of paddocks, avoiding pasture degradation.
8. The dimensions of the corral structures should be made considering the larger animals at the farm.
9. Define the material that will be used in the construction of the corral considering the availability, costs, and resistance. Prioritize the use of good quality materials to reduce maintenance costs.
10. Avoid the occurrence of protruded metal or wood, and the exposure of sharp objects (e.g. screws and wire nails).
11. The corrals should have the following structures: a gathering pen, holding pens, alleys, a forcing pen, a single file chute, a squeeze chute, a sorting hub, sorting pens, and a loading ramp.
12. The gathering pen is used to facilitate the entrance of cattle into the corral, and to accommodate them while waiting for the final handling (when there are no paddocks available in the surroundings).
13. The fences of the gathering pen can be made of 5-strand plain wire and should be 1.5 m high. The fences of the other structures shall be made with wood boards, metal bars, or steel cable, and shall be at least 1.8 m high.
14. The gates at the gathering pen should be positioned in the corners and should preferably open to both sides.
15. The holding and sorting pens are used to accommodate small groups of animals; the number, shapes and dimensions must be defined according to the handling procedures to be carried out.
16. Working alleys shall be around 3.2 m wide, avoiding sharp edges, they shall be positioned to facilitate driving cattle.
17. Fit a gate 5.0 to 6.0 from the end of the working alley that leads to forcing pen; use solid fences and build a walkway from where the animals will be driven. The walkway must be at least 75 cm from the ground, 80 cm wide, and having a handrail (1.0 m high) in all its length.
18. The forcing pen is used to facilitate the entry of animals into the single file chute and may have triangular or circular shapes. Prefer circular forced pens with one or two revolving gates and avoid corners, making it easier for the cattle to move.
19. The single file chute should keep the animals in a row to avoid cattle to turn back during handling. Its width must be defined based on the largest animals found at the farm; for commercial herds, it's generally used 80 cm width.
20. The walls of the single file chute can be upright (the base and top have the same width) or inclined (when the base is narrower than the top, forming a "V" shape).
21. Single file chute may be short, being designed to fit only one (3.0 m long) or two animals at the same time (6.0 m in length).
22. The squeeze chute is an equipment used to restrict the movement of cattle, having some structures to immobilize the animal's head and body.
23. There are three types of sorting hub ("egg shaped", "in-line" and "in the corner"), and they are built to sort groups of animals. All of them should have the solid sides.
24. The loading ramp is a single file alley with a ramp at the end, which allows the animals to reach the floor of the load compartment. It should be around 80 and 90 cm wide, depending on the cattle size.
25. The smaller the slope of the loading ramp, the better, being recommended not to exceed 25°.
26. The corral projects should include toilets and rooms for the storage of materials and equipment.
27. Install gutters to catch rainwater falling from the corral roof, to minimize mud formation.
28. Make regular maintenance on the floor of the corral. When necessary, replace the soil in areas with holes or depressions.
29. Consider paving the corral floor. Avoid using materials that increase the risk of hooves injuries, slipping and falling.
30. Before starting to rebuild a corral, identify the critical points and use this information to improve the project.

