CattleCheck™ [1]

Summary

Use these 10 key checks to improve the productivity, health, and profitability of your cattle. Rate each rule to identify areas for improvement.

Quick Takeaway: Good cattle performance comes from **balanced feeding, preventive health, clean water, good calf care, and simple record keeping**—all working together

Guiding Principles

1. **Start with system fit.** Only recommend practices the producer can realistically adopt and sustain for their environment and circumstances. Every recommendation should be:
    - technically feasible,
    - economically worthwhile,
    - appropriate for the production system,
    - practical for the farmer's labor and resources, and
    - likely to generate a positive return on investment.

2. **Fix the basics before trying to optimize.** For most systems, priority should be:
    1. Reproduction
    2. Feed supply
    3. Reducing mortality

3. **Diagnose before recommending**. Use the Check to identify the biggest constraints and tackle them first. Identify which interventions have the greatest probability of success and impact (#1 above).

A note of comparison of general differences between cattle, goats and sheep:

- Goats are the survival-and-marginal-land specialists,
- Sheep sit in between and suit grassy areas, and
- Cattle are the high-value, high-input animals that also power crop farming

In general, poorer and drier-area households lean on sheep and goats for resilience and liquidity, while cattle represent wealth, draught, and larger milk output for those who can support them.

[1] Suggested Citation Bell, M.A. & Bunn, D. (2026). CattleCheck™: A Practical Guide to Improving Cattle Productivity, Health and Profitability. © 2026

Despite the general comparisons, the right choice is location-specific — it depends on the feed base, water, disease pressure, market, and labour, which is what the system-fit check above helps assess.

The 10 Key Checks

Rule	Goal	Score* (1–5)
1. Right Breed & Animal Selection Link	Cattle are well adapted to local conditions and productive	
2. Preventive Health Link	Cattle are vaccinated, dewormed, and parasites are controlled as recommended	
3. Good Feed & Nutrition Link	Cattle receive enough quality feed year-round	
4. Water Link	Clean water is readily available	
5. Shelter & Comfort Link	Cattle have access to shade, water, and basic protection to reduce stress	
6. Calf (Neonatal) Care Link	Calves survive and grow well from birth	
7. Reproduction Management Link	Breeding is planned, and fertility is good	
8. Grazing & Feed Management Link	Grazing and feed resources are well managed	
9. Cleanliness & Hygiene Link	Housing and milking areas are clean	
10. Record Keeping & Planning Link	Farmers track performance and plan for profit	

**Score each: 1 = Very poorly, 3 = Okay, 5 = Very well*

Key Takeaways

- **Combinations matter:** Feed + water + health + calf care together drive productivity
- **Local solutions first:** Use local feeds, breeds, and materials
- **Start small:** Improve 1–2 practices first, then expand
- **Healthy calves = future herd = profit**

Detailed Guidance

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1. Right Breed & Animal Selection

Purpose: Ensure animals perform well under local conditions

Key actions

- Does the breed have the genetic potential to meet production goals for the environment and level of management? Use locally adapted or crossbred cattle as appropriate. (Locally adapted tend to be hardier, but often have lower production potential.

- Select healthy, productive animals - e.g., good productive mothers, fast growers, sound feet/teeth.
- Avoid inbreeding (i.e., never let a bull mate with his own female calves (daughters) or with his own mother (dam)).
- If used, ensure “improved breeds” are managed appropriately (they often have different disease, feed, and environment needs)

Choose animals that survive well and are productive under your conditions

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2. Preventive Health

Purpose: Reduce disease, mortality, and losses

Key actions

- Know the warning signs and when to call a vet or CAHW (early detection).
- Quarantine newly introduced animals (preferably for a minimum of 21 days - 30 is better). Extend if the animal shows any symptoms.
- Follow vaccination schedules (local diseases): **Major Ruminant diseases**
- Deworm regularly: **Deworming**
- Control ticks and parasites (by combining the strategic and timely use of acaricides (dips, sprays, or pour-ons), targeted dewormers, pasture/grazing management (to avoid heavily infested or wet areas), keep animals and housing clean, use tick-resistant breeds.
- Isolate sick animals

Prevent disease rather than treat it

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3. Good Feed & Nutrition

Purpose: Drive milk, growth, and reproduction

Key actions

- Feed according to animal category and production goals (growing, breeding, lactating).
- Improve feed processing (e.g., chopping, mixing) to increase intake.
- Provide forage (pasture, crop residues, fodder)

Basic Diet Needs for Cattle (Rule of Thumb)

What	Approx % in diet	Why important	Main Sources
Energy (from carbohydrates)	Beef maintenance: 15-20 Beef growing 40-55 Dairy lactating 35-42	Main driver of milk & growth	grasses, crop residues, grains
Protein (Crude)	Beef maintenance: 7-8 Beef growing 11-14 Dairy lactating 16-19	Growth, milk, reproduction	Legumes (alfalfa, cowpea), oilseed cakes
Fiber (roughage) (NDF): Grasses typically have a higher NDF content (50% to 70% DM), while legumes (e.g., alfalfa) (35% to 50% DM).	Beef maintenance: 55-65 Beef growing 15-30 Dairy lactating 28-35	Essential for rumen health	Pasture, hay, crop residues
Always needed—don't overfeed concentrates			
Minerals (Ca, P, salt, trace minerals)		Bones, milk, fertility	Mineral blocks, salt licks, diverse feeds
Vitamins (A, D, E mainly)		Immunity & reproduction	Usually from green forage
Water (most critical "nutrient")		30–70+ L/day (more for dairy)	Without water, nothing else works

- Supplement as needed and as possible (especially during the dry season) - albeit there may be economic and profitability concerns.
    - Where purchased feed isn't economical, see #8 — the lever is matching numbers to forage/water and timing births, not buying feed.
- Use body condition to guide feeding.
- Use local feed resources effectively

- Resources: **Field Guide - Feed Ration (Draft); Nutrition rules of thumb Draft); Fodder options (Draft)**

  Better feeding = more milk and faster growth

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4. Water

Purpose: Support digestion, milk production, and health

Key actions (See Water field guide)

- Provide ready access to clean water
- Ensure easy access
- Keep water cool and uncontaminated

  If water is poor, feed investments are wasted

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5. Shelter & Comfort

Purpose: Reduce stress and improve productivity

Key actions

- Provide shade (trees or simple structures) for beef and dairy. See **Shade - Multi-Purpose trees**
- Protect from rain and wind
- Especially for Dairy, avoid overcrowding (Adult Cow: 65-70 sq. ft. (6-6.5 sq m) per cow for covered area, and 100-150 sq. ft. (9.5-14 sq m) for open space.)
- Good shelter is especially important for dairy cattle - see Dairy Housing for details

  Comfort improves feed intake and production

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6. Calf (Neonatal) Care

Purpose: Ensure high survival and strong future animals

Key actions

- Give colostrum within 2 hours
- Keep the birth area clean
- Dip the navel with iodine
- Provide warmth and shelter for newborns.
- Monitor calves daily
- Wean gradually and manage young stock (feed + parasite control) for good growth.

Resource: **AFS Herd Health Kit: Reproduction & Neonatal Care**

👉 *Healthy calves are the foundation of the herd*

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7. Reproduction Management

Purpose: Maintain herd growth and productivity

Key actions

- Detect heat and breed on time
- Ensure cows are well-fed before and after calving
- Manage bulls or AI carefully
- Breed heifers at the right age/size
- Cull persistently infertile females
- Confirm pregnancy where practical

👉 *One calf per cow per year is a good target*

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8. Grazing & Feed Management

Purpose: Sustain feed supply and reduce costs

Extensive/pastoral and drought:

> Where buying feed isn't viable (many pastoral/low-market systems), the feed lever is matching animal numbers to available forage and water, and timing births to the green season — not purchased feed.
>
> **Drought**: herders rarely destock by choice (cattle are savings and status). Protect core breeding females, sell culls and surplus males early on agreed early-warning signals, concentrate scarce feed and water on priority animals, and link to early-warning, insurance/savings, and facilitated destocking.

- Mobility: "If feasible, move to the feed and water, and split the herd.
- Favor hardier, drought-tolerant breeds" (consider more goats or camels for some areas).

Key actions

- Rotate grazing if possible
- Avoid overgrazing
- Store feed (hay/silage) for dry periods (though feasibility varies)

👉 *Manage feed resources, don't just use them*

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9. Cleanliness & Hygiene

Purpose: Reduce disease and improve milk quality

Key actions

- Keep housing dry and clean
- Clean milking equipment
- Wash hands and udders before milking
- Prevent mastitis through good udder management (particularly dairy)

👉 *Clean animals produce clean milk*

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10. Record Keeping & Planning

Purpose: Improve decisions and profitability

Key actions

- Record milk, births, health, and costs
- Track the performance of animals
- Plan sales and breeding

👉 *What you measure, you can improve*

Disclaimer

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CattleCheck — Quick Field Checklist

Companion to the full CattleCheck. Tick each action and score each rule 1–5. **Score:** 1 = Very poorly · 3 = Okay · 5 = Very well

Before scoring: Start with system fit (only what the farmer can realistically do). Fix the basics first — reproduction, feed supply, reducing mortality. Tackle the biggest constraints first.

Farm/Owner: _____ Date: _____

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1. Right Breed & Animal Selection — Score ___/5

- ☐ Breed suited to local conditions and production goals
- ☐ Healthy, productive animals (good mothers, fast growers, sound feet/teeth)
- ☐ Inbreeding avoided (no bull with his daughters or dam)
- ☐ Any "improved" breeds managed appropriately

2. Preventive Health — Score ___/5

- ☐ Animal health warning signs known; knows when to call vet/CAHW
- ☐ New animals quarantined (21–30 days)
- ☐ Animals vaccinated on local schedule
- ☐ Animals dewormed regularly
- ☐ Ticks / external parasites controlled
- ☐ Sick animals isolated

3. Good Feed & Nutrition — Score ___/5

- ☐ Fed by category (growing / breeding / lactating)
- ☐ Enough quality forage year-round
- ☐ Feed processed (chop/mix) to boost intake
- ☐ Minerals / salt provided
- ☐ Body condition used to guide feeding

4. Water — Score ___/5

- ☐ Clean water always available
- ☐ Easy to access
- ☐ Kept cool and uncontaminated

5. Shelter & Comfort — Score ___/5

- ☐ Shade provided
- ☐ Protected from rain and wind
- ☐ Not overcrowded (~6–6.5 m² covered / cow)
- ☐ (Dairy) adequate housing

6. Calf (Neonatal) Care — Score ___/5

- ☐ Colostrum within 2 hours
- ☐ Clean birth area; navel dipped (iodine)
- ☐ Warmth/shelter for newborns
- ☐ Calves monitored daily
- ☐ Weaned gradually; young stock fed + parasite-controlled

7. Reproduction Management — Score ___/5

- ☐ Heat detected and bred on time
- ☐ Cows well-fed before and after calving
- ☐ Bull / AI managed carefully
- ☐ Heifers bred at right age/size
- ☐ Persistently infertile females culled
- ☐ Pregnancy confirmed where practical *(Target: one calf per cow per year)*

8. Grazing & Feed Management — Score ___/5

- ☐ Grazing rotated / overgrazing avoided
- ☐ Feed stored for dry periods (where feasible)
- ☐ (Extensive) animal numbers matched to forage and water; births timed to green season
- ☐ Drought plan: protect core breeding females, sell culls/surplus males early on early-warning signals, link to insurance/savings/facilitated destocking

9. Cleanliness & Hygiene — Score ___/5

- ☐ Housing dry and clean
- ☐ Milking equipment clean
- ☐ Hands and udders washed before milking
- ☐ Mastitis prevented (good udder management)

10. Record Keeping & Planning — Score ___/5

- ☐ Milk, births, health, and costs recorded
- ☐ Animal performance tracked
- ☐ Sales and breeding planned

Total: ___ / 50

Next step: Pick the 1–2 lowest-scoring checks that are also the biggest constraints, and act on those first.

Disclaimer: General educational guidance only — not a substitute for professional veterinary or agricultural advice. Adapt to local conditions and consult qualified professionals where possible.

Improving Animal Profitability — Priority Action Guide

With a focus on what is credible, relevant, practical and clearly beneficial.

A companion to CattleCheck / GoatCheck / SheepCheck

Core principle: Prioritize by *impact* × *actionability*, not impact alone. Many real problems (buying feed in drought, market prices, weak genetics) have no credible low-cost action for a poor farmer — so lead with the high-return levers the farmer can actually act on. Always begin by identifying the production system (e.g., pastoral, mixed crop-livestock, market-oriented dairy), as priorities differ among systems.

Where profit leaks come from: losing the animal (mortality), too few offspring (reproduction), and feed (the biggest cost and output limiter). Almost every lever sits under one of these.

Lever	Why it matters	Realistic low-cost actions
Tier 1 — Protect Production - Do first *(high impact, low cost, in farmer's control)*		
Improve reproductive efficiency	More offspring per female per year = core engine of output and herd growth	Timely breeding, regular calving/kidding interval, cull infertile females, good body condition at breeding
Reduce young-stock mortality	Losing a newborn loses the whole reproductive investment; 20–40% losses are common	Colostrum in first hours, clean birth, navel dip, warmth/shelter, daily checks
Prevent killer diseases & parasites	One outbreak or heavy worm/tick burden wipes out value	Vaccinate against local killers, strategic deworming, tick control, isolate sick, quarantine new
Tier 2 — Improve Efficiency - Do the affordable subset *(high impact but cost/market-constrained)*		
Feed management and nutrition	Biggest cost and output limiter — but often the least actionable for the poorest	Better use of available forage and crop residues, feed by animal category, minerals/salt, body condition scoring, feeding timing and conservation where economical (rather than simply buying feed).

Lever	Why it matters	Realistic low-cost actions
Water	Directly drives intake, milk, growth. Often the cheapest way to improve feed intake, milk production, and growth.	Clean troughs, easy access, keep cool/uncontaminated (urgent but low-option in drought)
Market access & sale timing	Selling in good condition and avoiding distress sales protects margin	Sell before condition drops, use market/price information, avoid saturated distress-sale windows
Tier 3 — Invest in the Future - Enabling / slower payback *(foundational or higher-barrier)*		
Breed & selection	Long-term, but improved breeds fail without feed/health to support them	Select good performers, avoid inbreeding, match breed to system — **not** buying genetics
Housing, comfort & hygiene	Cuts stress, disease, mastitis (most in dairy/intensive)	Shade, dry lying area, clean milking, udder hygiene
Records & planning	Supports better decisions across reproduction, feeding, health, and marketing.	Record births/deaths/health/costs, track performance, plan sales & breeding